

# SDMS US EPA Region V

## Imagery Insert Form

Document ID:

175149

Some images in this document may be illegible or unavailable in SDMS. Please see reason(s) indicated below:



Illegible due to bad source documents. Image(s) in SDMS is equivalent to hard copy.

Specify Type of Document(s) / Comments:



Includes \_\_\_\_ COLOR or X RESOLUTION variations.

Unless otherwise noted, these images are available in monochrome. The source document page(s) is more legible than the images. The original document is available for viewing at the Superfund Records Center.

Specify Type of Document(s) / Comments:

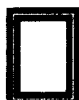
FIGURES SECTION



Confidential Business Information (CBI).

This document contains highly sensitive information. Due to confidentiality, materials with such information are not available in SDMS. You may contact the EPA Superfund Records Manager if you wish to view this document.

Specify Type of Document(s) / Comments:



Unscannable Material:

Oversized \_\_\_\_ or \_\_\_\_ Format.

Due to certain scanning equipment capability limitations, the document page(s) is not available in SDMS. The original document is available for viewing at the Superfund Records center.

Specify Type of Document(s) / Comments:



Document is available at the EPA Region 5 Records Center.

Specify Type of Document(s) / Comments:

175149

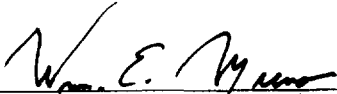
# **FIVE-YEAR REVIEW REPORT**

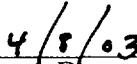
## **Envirochem Site Zionsville, Indiana**

**March 2003**

Prepared by:

United States Environmental Protection Agency  
Region 5  
Chicago, Illinois

  
\_\_\_\_\_  
William E. Myno, Director  
Superfund Division

  
\_\_\_\_\_  
Date

## Five-Year Review Summary Form

### SITE IDENTIFICATION

Site name (from WasteLAN): Envirochem Corp.

EPA ID (from WasteLAN): IND084259951

Region: 5

State: IN

City/County: Zionsville, Boone County

### SITE STATUS

NPL status: ☒ Final ☐ Deleted ☐ Other (specify) \_\_\_\_\_

Remediation status (choose all that apply): ☐ Under Construction ☐ Operating ☐ Complete  
☒ Shutdown without achieving cleanup goal

Multiple OUs? ☐ YES ☒ NO

Construction completion date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

Has site been put into reuse? ☐ YES ☒ NO

### REVIEW STATUS

Lead agency: ☒ EPA ☐ State ☐ Tribe ☐ Other Federal Agency \_\_\_\_\_

Author name: MATTHEW J. OHL

Author title: Remedial Project Manager

Author affiliation: U.S. EPA, Region 5,  
Superfund Division

Review period:\*\* 12 / 21 / 2002 to 3 / 31 / 2003

Date(s) of site inspection: 2 / 28 / 2003

Type of review:

☒ Post-SARA ☐ Pre-SARA ☐ NPL-Removal only  
☐ Non-NPL Remedial Action Site ☐ NPL State/Tribe-lead  
☐ Regional Discretion

Review number: ☒ 1 (first) ☐ 2 (second) ☐ 3 (third) ☐ Other (specify) \_\_\_\_\_

Triggering action:

☒ Actual RA Onsite Construction at Site ☐ Actual RA Start at OU#  
☐ Construction Completion ☐ Previous Five-Year Review Report  
☐ Other (specify) \_\_\_\_\_

Triggering action date (from WasteLAN): 11 / 25 / 1998

Due date (five years after triggering action date): 11 / 25 / 2003

\* ["OU" refers to operable unit.]

\*\* [Review period should correspond to the actual start and end dates of the Five-Year Review in WasteLAN.]

**Envirochem Site  
Zionsville, Boone County, Indiana  
First Five-Year Review Report**

**I. Executive Summary**

The Envirochem Superfund Site (also known as the "Environmental Conservation and Chemical Corporation," or the "ECC" Site) is located in Boone County, Indiana, approximately 5 miles north of Zionsville and ten miles northwest of Indianapolis. The Site, which occupies approximately 6.5 acres of land, was placed on the National Priorities List ("NPL") for site cleanup in September 1983.

Envirochem began operations in 1977 and was engaged in the recovery, reclamation, and brokering of primary solvents, oils and other wastes received from industrial clients. Waste products were received in drums and bulk tankers and prepared for subsequent reclamation or disposal.

The accumulation of contaminated stormwater on-site, poor management of the drum inventory, and several spills caused State and U.S. EPA investigations of Envirochem. The State pursued Envirochem for violations of the Environmental Management Act, the Air Pollution Control Law, and the Stream Pollution Control Law, resulting in a July 1981, Consent Decree approved by the Boone County Circuit Court. That Court imposed a civil penalty against Envirochem and placed Envirochem into receivership. In May 1982, Envirochem was ordered by the court to close and environmentally secure the Site for failure to reduce hazardous waste inventories. By August 1982, Envirochem was found to be insolvent.

Removal actions including removal of tanks, containers, and contaminated soils, were conducted at the site to address imminent and substantial threats. Long term response actions have been implemented at the site as required by the Record of Decision ("ROD"), as amended. The long term response actions included excavation and consolidation of contaminated soils, placement of an impermeable cover, and soil vapor extraction ("SVE").

The SVE treatment system is currently shutdown and the remedial actions at the site are not protective. The remedial actions at the site have failed to meet cleanup standards and there appears to be ongoing releases of contaminated groundwater to nearby surface water, Unnamed Ditch. Additional remedial action contemplated in the Consent Decree is necessary to ensure protectiveness. U.S. EPA and IDEM are negotiating the details of the additional remedial action with the Trustees who represent the PRPs for the site.

**Envirochem Site  
Zionsville, Boone County, Indiana  
First Five-Year Review Report**

**I. Introduction**

The purpose of the five-year review is to determine whether the remedy at a site is protective of human health and the environment. The methods, findings, and conclusions of reviews are documented in Five-Year Review reports. In addition, Five-Year Review reports identify issues found during the review, if any, and identify recommendations to address them.

The United States Environmental Protection Agency (U.S. EPA or "the Agency") is preparing this Five-Year Review report pursuant to Section 121 of the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), and Section 300.430(f)(4)(ii) of the National Oil and Hazardous Substance Contingency Plan (NCP). CERCLA §121 states:

*If the President selects a remedial action that results in any hazardous substances, pollutants, or contaminants remaining at the site, the President shall review such remedial action no less often than each five years after the initiation of such remedial action being implemented. In addition, if upon such review it is the judgement of the President that action is appropriate at such site in accordance with section 104 or 106, the President shall take or require such action. The President shall report to the Congress a list of facilities for which such review is required, the results of all such reviews, and any actions taken as a result of such reviews.*

The Agency interpreted this requirement further in the NCP. The NCP at 40CFR§300.430(f)(4)(ii) states:

*If a remedial action is selected that results in hazardous substances, pollutants, or contaminants remaining at the site above levels that allow for unlimited use and unrestricted exposure, the lead agency shall review such action no less often than every five years after the initiation of the selected remedial action.*

U.S. EPA, Region 5, conducted the five-year review of the remedy implemented at the Envirochem site in Zionsville, Boone County, Indiana. This report documents the results of this review conducted by Matthew J. Ohl, Remedial Project Manager ("RPM") for the site. The review was initiated in December 2002 and completed in March 2003. The Indiana Department of Environmental Management ("IDEM") also reviewed this report.

This is the first five-year review for the Envirochem site. The triggering action for this statutory review is the start of actual on-site remedial action construction on November 25, 1998. The five-year review is required due to the fact that hazardous substances, pollutants, or contaminants remain at the site above levels that allow for unlimited use and unrestricted exposure.

## II. Site Chronology

Event	Date
Initial discovery of problem or contamination	April 1, 1979
NPL listing	September 8, 1983
Removal actions including removal and treatment or disposal of cooling pond waters, approximately 30,000 drums of waste, 220,000 gallons of hazardous waste from tanks, 5,650 cubic yards of contaminated soil and cooling pond sludge and 20,000 gallons of contaminated water	1983-1985
Completion date of Remedial Investigation/Feasibility Study	September 25, 1987
ROD signature	September 25, 1987
ROD Amendment	June 7, 1991
Explanation of Significant Differences	June 1997
Consent Decree	September 10, 1991
On-site Remedial Action Construction Start	November 25, 1998
Deletion from NPL	Site has not been deleted.
Previous five-year reviews	None

## III. Background

### Physical Characteristics

The Envirochem Superfund Site (also known as the "Environmental Conservation and Chemical Corporation," or the "ECC" Site) is located in a primarily rural area of Boone County, Indiana, approximately 5 miles north of Zionsville and ten miles northwest of Indianapolis. The Site, which occupies approximately 6.5 acres of land, was placed on the National Priorities List ("NPL") for site cleanup in September 1983.

### Land and Resource Use

The current land use for the surrounding area is residential, commercial, and agricultural. Nearby residents use private wells for their water supply.

### History of Contamination

Envirochem began operations in 1977 and was engaged in the recovery, reclamation, and brokering of primary solvents, oils and other wastes received from industrial clients. Waste products were received in drums and bulk tankers and prepared for subsequent reclamation or disposal.

The accumulation of contaminated stormwater on-site, poor management of the drum inventory, and several spills caused State and U.S. EPA investigations of Envirochem. The State pursued Envirochem for violations of the Environmental Management Act, the Air Pollution Control Law, and the Stream Pollution Control Law, resulting in a July 1981, Consent Decree approved by the Boone County Circuit Court. That Court imposed a civil penalty against Envirochem and placed Envirochem into receivership. In May 1982, Envirochem was ordered by the court to close and environmentally secure the Site for failure to reduce hazardous waste inventories. By August 1982, Envirochem was found to be insolvent.

### **Initial Response**

U.S. EPA proposed the Envirochem Site for the NPL in December 1982 and the Site was placed on the list in September 1983. A Remedial Investigation ("RI") was conducted in 1983 and 1984 which involved an investigation of the nature and extent of contamination in soil, groundwater, surface water and sediments on and around the Envirochem Site. A Feasibility Study ("FS") was completed in 1986, which evaluated several alternatives for cleaning-up the Envirochem Site and the neighboring Northside Landfill Site, which had also been placed on the NPL.

Surface contaminants were removed from the Envirochem Site in an operation extending from March 1983 through 1984. These cleanup efforts were initiated by U.S. EPA and completed by a group of PRPs, overseen by U.S. EPA and IDEM, pursuant to a Consent Decree entered on November 9, 1983. Actions included removal and treatment or disposal of cooling pond waters, approximately 30,000 drums of waste, 220,000 gallons of hazardous waste from tanks, 5,650 cubic yards of contaminated soil and cooling pond sludge.

In March 1985, ponded water containing hazardous substances was discovered on the concrete pad at the southern end of the Envirochem Site. During the resulting emergency action, U.S. EPA constructed a sump at the southeast corner of the Site, and removed and disposed of 20,000 gallons of contaminated water containing high levels of volatile organics.

### **Basis for Taking Action**

Exposures to soil and groundwater are associated with human health risks. The health risks are due to levels of hazardous substances exceeding U.S. EPA's risk management criteria for either the average or reasonable maximum exposure scenarios. Risks from exposure to groundwater are attributed to the presence of various organic and inorganic hazardous substances that exist at concentrations exceeding State and Federal drinking water standards and surface water quality standards.

## **IV. Remedial Actions**

### **Remedy Selection**

A ROD was issued by U.S. EPA on September 25, 1987, selecting a combined remedy for the Envirochem Site and the adjacent Northside Sanitary Landfill Site. That ROD provided for an impermeable cap over the contaminated areas and a groundwater extraction and treatment system.

Based on a treatability study performed by the PRPs, U.S. EPA and IDEM later determined that it would be feasible and preferable to actively treat the contaminant source at the Envirochem Site, rather than simply containing these materials as provided for in the 1987 ROD. U.S. EPA

therefore issued Amended RODs in June 1991, establishing separate, complementary remedial approaches for the Envirochem and Northside Sites.

As amended, the ROD for Envirochem required:

- Access Restrictions: Placement of deed restrictions on the property to prevent future development of the land thereby protecting against direct contact with contaminated soil and groundwater.
- Soil vapor extraction ("SVE"): Construction of a system utilizing injection and extraction trenches to vaporize and extract volatile organic compounds and phenols from contaminated soils. These contaminants would be captured and removed utilizing granular activated carbon. The goal of the soil vapor extraction system is to clean the soil contamination source areas to cleanup levels that would assure long-term protection of groundwater and surface water.
- RCRA Compliant Cap and Surface Controls: Construction of a multi-layered cap over the entire Site. The cap would comply with Resource Conservation and Reclamation Act ("RCRA") performance-based standards. (The presence of the cap would also improve the efficiency of the soil vapor extraction system by reducing the amount of air and vapor that could escape from that system.) Surface controls include rerouting of the unnamed ditch west of Envirochem to keep surface waters further away from contaminated soil areas and demolition and disposal of on-site buildings.
- Contingent Groundwater Treatment: In the event the soil vapor extraction system did not achieve soil cleanup standards within a five year operation period, or if at that time surface water or groundwater samples still showed unacceptable levels of contamination, groundwater extraction and treatment would be required. Collected groundwater would be treated to meet effluent standards before discharge into Finley Creek. Groundwater extraction and treatment would continue until cleanup standards were met.

### **Remedy Implementation**

U.S. EPA and IDEM entered into a Consent Decree with certain PRPs under which those PRPs agreed to perform (under U.S. EPA and IDEM supervision) the final remedy for the ECC Site described in the Amended ROD. That Consent Decree was entered September 10, 1991.

Since that time, the PRPs have, under U.S. EPA and IDEM supervision: (1) conducted a Supplemental Investigation in January 1993, to collect groundwater data needed to design dewatering and treatment facilities associated with the SVE system; (2) obtained the necessary access agreements in July 1993, with the site owners to permit cleanup of contaminated areas and support activities on adjacent property; (3) completed site preparation work in the Fall of 1993 (with final supplemental work in the Spring of 1994), including an upgrade of site fencing, removal of site structures and debris, decontamination and disposal of tanks, construction of pads for future decontamination and storage activities, site grading and construction of drainage channels; (4) from September 1994, through January 22, 1996, secured, inventoried, analyzed and removed drums of contaminated material that had accumulated on-site during previous investigations and response activities; and (5) submitted a 90% design for completion of the remedial action on December 19, 1991 which the parties recognized (in light of circumstances described below) required substantial revision, submitted a new 30% design plan for review and comment in July, 1994, submitted a revised 30% design plan in January 1995, submitted a 90% design plan on October 27, 1995, and submitted a draft 100% design on September 26, 1996.



During the course of these activities, the PRPs encountered several difficulties. Solutions to these difficulties have been developed jointly by the PRPs, U.S. EPA and IDEM. These solutions affected the remedy and led to the changes described in an Explanation of Significant Differences ("ESD"). First, during the January 1993, Supplemental Investigation, the PRPs identified nine organic compounds in site groundwater that had not been identified at levels of concern in the Remedial Investigation (and thus did not have cleanup standards in the ROD). The parties discussed and agreed to a mechanism for establishing appropriate cleanup standards for certain of these additional compounds.

Second, the Supplemental Investigation also showed that the water table at the southern end of the site was higher than it was during the SVE pilot test conducted in 1987, and was high enough that it could be expected to hamper the effectiveness of SVE in that area. In response to this data, the PRPs evaluated other options for addressing contamination in the southern end of the site and presented this evaluation to U.S. EPA and IDEM.

Third, during excavation activities conducted as part of the site preparation work (both in preparing the drainage channels and in preparing the decontamination pad), contamination was encountered to the west of the approximate western site boundary identified in the ROD and the Consent Decree. This required the PRPs to conduct additional sampling along a portion of the western boundary of the site to better determine the nature and extent of contamination in that area. (The PRPs had planned to use this area as part of the "Central Support Zone" for storage and movement of equipment and materials for the remedy.) The PRPs conducted their Central Support Zone Investigation in July 1995.

Fourth, further researching SVE technologies in preparing the design, the PRPs learned that: (1) SVE technology developments made it possible that extraction wells might prove to be as effective, or more effective, than the extraction trenches specified in the Amended ROD; (2) on-site activities to operate and maintain the SVE system would likely damage the integrity of the RCRA cap, requiring potentially difficult repairs and suggesting that use of an interim cap could still improve the effectiveness of SVE and be upgraded to a full RCRA cap after SVE was complete; (3) SVE contractors possess specialized and sometimes proprietary information on extraction processes that are necessary to a complete design but would not be available until after a SVE contractor is selected based on an initial design, an approach that was somewhat inconsistent with the procedures described in the 1991 Consent Decree.

Fifth, Central Support Zone Investigation data indicated that the organic carbon content of site soils was generally higher than was assumed in the model used to set soil cleanup levels in the ROD Amendment. That model calculated the rate at which contamination in the soil would be transferred to groundwater as groundwater flowed through the Site. Using that model, U.S. EPA calculated cleanup standards that would reduce soil contamination to levels that would be protective of groundwater. The site-specific data on the organic carbon content of site soils indicated that a slightly higher level of contamination in the soil would likely remain adsorbed to the soil rather than carried along with the groundwater than was originally predicted. As a result of this new information, U.S. EPA and IDEM agreed to make minor revisions to the model and the cleanup standards to reflect the actual site conditions. Since cleanup standards were going to be revised, U.S. EPA and IDEM also agreed to add a minor change in the cleanup standard for 1,1-Dichloroethane ("DCA"). The change in the DCA cleanup standard was based on information about the cancer potency of DCA developed since the time of the 1991 ROD Amendment. Since that time, a general scientific consensus has developed that concludes DCA does not pose the level of cancer risk previously believed. As a result, the risk calculation and cleanup standard for DCA were re-calculated to reflect this information.

U.S. EPA and IDEM have jointly overseen cleanup activities at the Envirochem Site under the authority of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended ("CERCLA"), 42 U.S.C. §9601, *et seq.* U.S. EPA and IDEM entered into a Consent Decree with certain potentially responsible parties ("PRPs") who agreed to perform the final remedy for the Site. That Consent Decree was approved by the U.S. District Court for the Southern District of Indiana on September 10, 1991. The Consent Decree requires those PRPs to implement the remedy selected by U.S. EPA (with IDEM's concurrence) in a September 25, 1987, Record of Decision ("ROD") and a June 7, 1991, ROD Amendment. That Consent Decree and accompanying documents were modified to reflect the remedy changes described in the ESD.

While the PRPs began designing and implementing the final remedy for the Site under U.S. EPA and IDEM oversight, newly developed information persuaded U.S. EPA and IDEM that certain technical modifications and improvements to the selected remedy were appropriate. Section 117(c) of CERCLA and Section 300.435(c)(2)(I) of the National Oil and Hazardous Substances Contingency Plan establish procedures for explaining, documenting, and informing the public of significant changes to the remedy that occur after the ROD is signed. An ESD was required since the remedial action to be taken differs significantly from the remedy selected in the ROD but did not fundamentally alter that remedy with respect to scope, performance or cost.

As a result of the new information developed and the difficulties encountered after the Amended ROD was signed, U.S. EPA (in consultation with IDEM) made four significant changes to the Envirochem ROD as amended in 1991. The PRPs agreed to these changes and they were incorporated in an amendment to the 1991 Consent Decree and revisions to Exhibits A and B of that Decree describing the work to be performed at the Site.

#### 1. Excavation of Southern Portion of Site:

The PRPs conducted an SVE treatability study in 1988. That study persuaded U.S. EPA and IDEM that SVE would be an appropriate method for source remediation across the Envirochem Site. However, during pre-design studies and site preparation work, it was observed that groundwater elevations at the southern area of the Site, in the area of the concrete pad, indicated consistent levels at or near the ground surface. Pounded water on and around the concrete pad was noted on numerous occasions as a result, in part, of high water table elevations. It is assumed that very dry weather conditions in 1988 (when the SVE treatability study was conducted) resulted in a lower than normal water table elevation and thereby created temporarily favorable conditions for the SVE method in the southern concrete pad area. Because SVE is significantly less effective in saturated soils, and because SVE system construction in saturated soils would significantly increase engineering difficulties and costs, U.S. EPA and IDEM agreed to consider another method for remediating soils in the southern portion of the Site.

At U.S. EPA's direction, the PRPs prepared an evaluation of alternatives to SVE for the southern area of the Site. Based on that evaluation, U.S. EPA (with IDEM's concurrence) adopted an alternative approach to the southern area soil contamination.

In order to remediate soils in the southern portion of the Site, soils beneath the concrete pad were generally excavated to a depth of 9 feet. (This is the depth to which SVE was originally expected to be effective.) Sheet pilings were used in the eastern portion of this area to reduce the amount of water that will seep into the excavated area. When the 9 foot depth was reached, any remaining visible contamination was also excavated where possible, and any contamination of concern identified through field screening was also excavated. Excavation was limited by concerns about sidewall stability and the need to avoid an underlying zone of highly permeable sand. Most of the water accumulated in the excavation area was collected, characterized, treated

to meet discharge standards and appropriately disposed of through discharge to an on-site surface water body. Confirmatory soil samples were collected and the excavation was backfilled with clean soil from an off-site borrow source. The concrete pad overlying this area was crushed and excavated with the underlying soil. The excavated soils and crushed concrete was moved to the northern area of the Site where SVE was performed on the soil and crushed concrete. An impermeable cap which complies with RCRA Subtitle C standards was to be placed over the excavated area unless the confirmatory sampling shows that the excavation produced the equivalent of a clean closure (i.e., no detectable contamination) under RCRA. This cap was not constructed while the PRPs pursued a closure of the area through IDEM. Based upon information including the discovery of separate phase solvent contamination near the excavation and apparent ongoing releases to Unnamed Ditch, the closure of the area without further remedial action is not expected.

## 2. Additional Cleanup Standards and Revised Cleanup Standards:

In 1993, groundwater sampling at the Envirochem Site detected nine organic compounds for which the ROD and ROD Amendment had not established cleanup standards. After evaluating this data, U.S. EPA, IDEM and the PRPS agreed to add cleanup standards for three of these contaminants in this ESD and in a revision to the 1991 Consent Decree. These contaminants include the following: vinyl chloride, 1,2-dichloroethene (total) and 1,2-dichlorobenzene. As with the other soil cleanup standards in the ROD and the Consent Decree, soil cleanup standards for these compounds are calculated using a model intended to assure that ground and surface water potentially impacted by contamination at the Site would satisfy Maximum Contaminant Levels ("MCLs"), or if no MCLs exist for a particular compound, Lifetime Drinking Water Health Advisory ("LDWHA") standards or risk-based standards. These MCLs, LDWHAs and risk-based standards also apply to on-site groundwater. Surface water cleanup standards for these compounds are based on State water quality standards.

In the course of evaluating and establishing cleanup standards for these additional contaminants, U.S. EPA, IDEM and the PRPs identified another factor that led to a minor additional correction of the prior cleanup standards. The original model calculated soil cleanup standards using a literature reference value for the organic carbon fraction for the type of soils expected to be found in this area of Indiana. In November 1995, the PRPs collected an additional 79 soil samples from 16 boring locations on-site. The results of this sampling event provided a site-specific organic carbon fraction to be used in the model for calculating soil cleanup standards. The use of a site-specific organic carbon value resulted in an adjustment in the soil cleanup standards for most soil contaminants.

Following the approach used in the ROD Amendment, the re-calculated soil cleanup standard for each compound (including the nine additional compounds detected in the 1993 groundwater sampling) were then compared to actual observed levels of that compound in site soils. Compounds that have been observed in site soils at levels above the soil cleanup standard and/or has been observed in groundwater at levels above the groundwater cleanup standard is listed in Table 3-1. These cleanup standards therefore address the compounds which currently pose an unacceptable risk to groundwater (and surface water) at the Site. The standards are enforceable under the revised Consent Decree. Under this approach, the recalculation of cleanup standards led to the removal of chlorobenzene, chloroform and 1,1-DCA from the table as well as the addition of vinyl chloride, 1,2-dichloroethene (total) and 1,2-dichlorobenzene to the table. The SVE system was expected to reduce these compounds of concern to their soil cleanup levels and at the same time reduce significantly the concentration of the other organic compounds which are now present at lower levels in the site soils.

A body of toxicological evidence gathered since the cleanup standards were developed in 1989-90 indicates that the toxicity of 1,1-Dichloroethane ("DCA") is significantly less than was assumed several years ago. This development impacted the potential health risks posed by that compound. Ordinarily, site cleanup standards are "frozen" at the time a ROD is issued. This approach provides certainty to the parties and the public and avoids the distraction of repeated requests for marginal changes based on new scientific studies. Because U.S. EPA and IDEM were already reconsidering the cleanup standards in light of the revision in soil organic carbon content in the underlying model, it was deemed appropriate to adjust the DCA model assumptions to reflect these significant scientific developments.

### 3. RCRA-Compliant Cap:

As stated above, soils and crushed concrete from the southern area of the Envirochem Site were excavated and moved to the northern portion of the Site. After this material was placed and graded properly, a surface cover was placed over this area. This cover consisted of a minimum of 3 feet of compacted, impermeable native soil and 1 foot of top soil to support vegetation. This cover also facilitated the proper operation of the SVE system. The final cover, consisting of a geocomposite drainage net with a minimum transmissivity of 0.01 ft<sup>2</sup>/sec., a minimum of 1 foot of soil and 1 foot of topsoil was placed on top of the originally placed soil layer described above. The final cover is therefore essentially identical to the cover described in the Amended ROD with one major exception. This final cover was not extended over the excavated area on the southern end of the Site as closure of the area was being pursued. Additional work provisions are currently being negotiated to address the entire site including this area.

### 4. Re-drawn Remediation Boundary:

In response to unexpected contamination found during site preparation work and longstanding U.S. EPA concerns, additional soil sampling was conducted in 1995, in the area of the Site originally labeled as the Central Support Zone ("CSZ") which is located along the Site's western edge. This sampling effort determined that soils in part of the CSZ are contaminated at levels posing a threat to human health and the environment. The CSZ is contaminated with the same compounds found on other areas of the Envirochem Site. In order to address this additional contaminated zone, the boundary for remediation has been re-drawn by agreement, as shown in attached Figure 1. SVE was also conducted in this zone and the same cleanup standards as detailed in Table 3-1 apply.

### System Operation/Operation & Maintenance

The system was operated until 2001 when it was determined that it could not meet cleanup standards. Costs associated with system operation and operation & maintenance exclusive of Trustee costs, legal costs, and insurance costs are provided in Table 2. A comparison to estimated O&M costs cannot be made since O&M costs were not calculated at the time of the ROD amendment. The total present worth of the remedial action was expected to be between \$5 million to \$9 million. The actual costs in Table 2 are for each of the following major contractors.

Versar, Inc. was the contractor retained to complete the SVE design and implement the remedy to achieve cleanup standards.

Environ has done the subsurface monitoring and engineering work for augmentation of the SVE system, as well as general engineering support to the Trust

ERM was originally retained to design the remedy. It was replaced in that role by AWD. ERM however continued to provide engineering support and some oversight of work at the site.

AWD, in addition to doing supplemental investigations in aid of the design, also was retained to do the site preparation and removal activities at the site, and help in the redesign of the remedy to the revised remedial alternative that was ultimately approved by U.S. EPA.

Dow Environmental acquired AWD and continued in that work.

Radian acquired Dow Environmental and completed the design to the point where the contract to complete the SVE portion of the design and implement it to achieve cleanup levels could be bid out. That was the contract that Versar was awarded.

OEM/Demaximus assisted the Trust and AWD during field investigations and site prep and removal, and then did some routine maintained and site security work.

Geraghty & Miller acted as consultant in connection with the revised remedial alternative that was developed by AWD for the Trust.

Ground Water Consultants provided advise as the maximum safe depth of the excavation in the southern concrete pad area during remedy implementation.

### **Surface Water and Groundwater Monitoring Systems**

The monitoring system consists of surface water monitoring points, groundwater monitoring wells and piezometers. Installation of the groundwater monitoring wells has been documented including boring logs and well construction details. Monitoring is ongoing.

The Remedial Action systems were inspected and found to comply with the intent of the Remedial Design. The Settling Defendants are represented by Trustees who have contracted with Environ and others to perform site operation and maintenance (O&M) activities. The work is being conducted in accordance with O&M requirements. The O&M requirements incorporate all U.S. EPA and State quality assurance and quality control procedures and protocols.

The long term remedial action requirements at the site for O&M include, but are not limited to the following activities:

1. Routine maintenance of any groundwater monitoring systems, fencing and warning signs; and
2. Periodic sampling and testing of groundwater monitoring wells and surface water.

Further information is provided in the Data Review section of this report.

### **V. Progress Since the Last Five-Year Review**

This is the first five-year review for the site.

## **VI. Five-Year Review Process**

### **Administrative Components**

This report was conducted by Matthew J. Ohl, Remedial Project Manager ("RPM") for the site. In support of U.S. EPA's recent negotiations with the PRPs regarding additional work, U.S. EPA's oversight contractor, Ch2M Hill conducted a review of existing data. The RPM incorporated their data review into this report. IDEM also reviewed this report. The potentially responsible parties were formally notified of the five-year review in February 2003, after being verbally notified earlier.

### **Community Notification and Involvement**

The public was notified of the initiation of the five year review on December 11, 2002, through an ad placed in newspapers with local circulation. Community involvement activities have been minimal in the past year due to a lack of new developments at the site and a low level of public interest. The repository at the public library in Zionsville provides a source of information for interested community members and some public meetings have been held in the past to inform and involve the community.

### **Document Review**

This five-year review consisted of a review of relevant documents including, legal documents, Operation & Maintenance records and monitoring data. Applicable groundwater cleanup standards were reviewed. With the exception of arsenic, there have been no changes in ARARs or TBCs and there are no new standards or TBCs.

### **Data Review**

This review summarizes the analytical results from monitoring required of the PRPs by Exhibit A of the Consent Decree. Monitoring reports for the subsurface and surface water sampling locations (Figure 1) were submitted by the PRPs to U.S. EPA and IDEM on a quarterly basis. Monitoring reports covering the 4th Quarter of 1998 through 2nd Quarter of 2002 were reviewed. Please note the PRPs for the site refer to contaminated groundwater as subsurface water in their reports.

### **Verification and Compliance Monitoring Requirements**

Per the Revised Exhibit A of the Consent Decree, verification of soil cleanup by the Soil Vapor Extraction (SVE) system will be established when each of the following is met:

1. The soil vapor from the restart spike tests shows compliance with the calculated soil vapor concentrations in equilibrium with Acceptable Soil Concentrations for the VOCs listed in Table 3-1, phenol and 1,2-dichlorobenzene ("Soil Vapor Criterion").
2. Onsite till wells show compliance with the Acceptable Subsurface Water Concentrations as shown in Table 3-1 or Applicable Subsurface Water Background Concentrations according to the procedures in Section 4.2 of the Revised Exhibit A of the Consent Decree ("Onsite Till Water Criterion").
3. Soil samples show compliance with the Acceptable Soil Concentrations as specified in Table 3-1 ("Soil Sampling Criterion").

Key provisions in the Consent Decree state the following:

1. If after 5 years from the initial commencement of SVE (or sooner as permitted in the Decree) Soil Cleanup verification has not been established, then the Additional Work provisions of Section VII of the Consent Decree will apply.
2. If soil cleanup verification is achieved, post-soil cleanup compliance monitoring will be implemented to ensure that the SVE remedy continues to protect groundwater and surface water. The compliance monitoring will consist of the sampling of onsite till wells, offsite till wells, offsite sand and gravel wells, and surface water for 7 years on a semi-annual basis.

### **Verification and Compliance Monitoring Results To-Date**

The soil vapor concentrations from the SVE system have met the Soil Vapor Criterion, so the SVE system was shut down by the PRPs. However, since the Onsite Till Water Criterion is not being met due to groundwater concentrations exceeding the Acceptable Subsurface Water Concentrations in onsite till wells, soil samples were not collected for compliance with the Soil Sampling Criterion. Additionally, there are also groundwater concentrations exceeding the Acceptable Stream Concentrations in offsite till wells, offsite sand and gravel wells, and surface water compliance monitoring locations.

This review focuses on constituents that are above (exceed) the Site-Specific Acceptable Subsurface Water Concentrations (for the onsite till wells) and the Acceptable Stream Concentrations (for the offsite till wells, sand and gravel wells, and surface water sampling locations) from Table 3-1 in the Revised Exhibit A of the Consent Decree. Apparent trends in the compound concentrations are also discussed for each well and sampling location.

Table 1 (in Attachment A) details the frequency, range, and apparent trends in concentrations above the acceptable concentrations, and in some cases trends are also noted for concentrations detected, but not exceeding, the acceptable concentrations. The Frequencies of Exceedance at 75% or greater and the significant Observed Apparent Trends are highlighted in bold red type. Table 3-1 (Attachment B) from the Revised Exhibit A presents the full list of acceptable concentrations.

Tables B-1 through B-17 (Attachment C) present the full set of analytical data collected by Environ, Inc. on behalf of the PRPs from the Envirochem wells and surface water sampling points. The results cover the period from 4<sup>th</sup> Quarter 1998 through the latest round (2<sup>nd</sup> Quarter 2002). Results that exceed the acceptable concentrations are highlighted for clarity.

### **Summary of Results**

The discussion of the compounds with concentrations above acceptable concentrations, and apparent trends in the concentrations, for each well is included in Attachment A with Table 1. The following is a summary of the noted trends for each well and sampling location:

1. For the onsite till wells, T-2/2A and T-3 show consistent and, in some cases, increasing concentrations of multiple volatile organic compounds (VOCs) and one semi-volatile organic compound (SVOC) above the acceptable concentrations established in the Consent Decree. Tetrachloroethene (PCE), trichloroethene (TCE), 1,2-dichloroethene total (1,2-DCE total), and 1,1,1-trichloroethane (1,1,1-TCA) are orders-of-magnitude above acceptable concentrations. In particular, 1,2-DCE total has been at concentrations of up to 4,200 ug/L.

2. For the offsite till wells, all but well T-5 has had concentrations of VOCs above the acceptable concentrations. Well T-6 is between the contaminated onsite till area and the Unnamed ditch and has breakdown products of compounds in the onsite area. Well T-6 also has the greatest number of compounds consistently above acceptable concentrations, shows the largest increase in concentration for a specific compound (one order-of-magnitude for vinyl chloride), and has an order-of-magnitude exceedance of 1,2-DCE total. Downgradient wells T-9 and T-10 have both shown recent increases in compound concentrations above acceptable concentrations, with concentrations of 1,2-DCE total in Well T-10 more than two orders-of-magnitude above the acceptable concentration.
3. For the offsite sand and gravel wells, downgradient well S-4/4A has had the greatest number of compound concentrations above the acceptable concentrations, including 1,2-DCE total which has been both consistently exceeding and increased in the latest sampling event. Concentrations of 1,2-DCE total were also above acceptable levels in ECC MW-13 and are the greatest concern relative to the magnitude of exceedance and its potential for offsite migration. The elevated levels of arsenic in ECC MW-13 are likely due to reducing conditions causing arsenic to co-precipitate with iron as it encounters higher levels of oxygen near the groundwater-surface water interface.
4. In the downgradient offsite wells T-9, S-3 and S-4/4A, vinyl chloride concentrations are below the acceptable concentration but are increasing. In well T-9, the vinyl chloride concentrations have recently been approaching the acceptable concentration.
5. The surface water sampling location downgradient from the site, SW-1, has shown recent exceedances of 1,2-DCE total above the acceptable concentration. It is of particular concern for surface water because it is at very high concentrations in onsite and offsite till wells. The maximum observed concentration of 5 ug/L suggests that substantial dilution of the groundwater discharging to the unnamed ditch is occurring.

### **Site Inspection**

A site inspection was conducted on February 28, 2003. The weather was partly cloudy and cold with temperatures ranging in the 30's. Record snowfalls in the area prevented visual inspection of the cover and other site features. Present at the inspection were Matthew J. Ohl, Remedial Project Manager, Michael Habeck of IDEM, and a representative from Environ.

The fencing on the west side of the site has taken heavy damage, potentially from nearby heavy equipment operations. There is evidence of subsidence and/or erosion on the north side of the site leaving large gaps, i.e., 1 to 2 ft., between the bottom edge of the fence and the ground surface. Woody vegetative growth, especially vines are beginning to pull the fence down along the west side of the site. Large openings of 3 to 4 ft. exist where the fence crosses drainage ditches on the north and south sides of the site. Attempts to add strands of barbed wire to close the gap have proven ineffective. Trespassers are simply moving the barbed wire out of the way to allow easy access.

Many of the monitoring well casings are not locked. The hinges have rusted through on several other well casings to the point where the casing lid can be opened without opening the lock. Some wells do not have protective casings.

The treatment system is shut down and its components are in fair condition. Many of the exterior hoses are degraded and would require replacement or repair prior to re-starting the system. The tanks appear to be between one-third to one-half full of frozen water. Electrical service appears to be intact and the panel boxes are not locked. There does not appear to be on-site phone



service. The treatment buildings appear to be in good condition. Most records are maintained off-site since the treatment system is currently shut down. However, the site health and safety plan is located in the on-site trailer.

## **Interviews**

The need for community interviews was discussed with the community involvement coordinators familiar with the Zionsville area. The level of public interest and complexity of the remedy were considered in determining whether to conduct interviews. Community interviews were not determined to be necessary at this time, however, interviews may be conducted in the future if there are significant changes in these factors.

Two interviews were conducted as part of this 5-year review, including the former U.S. EPA Remedial Project Manager and the current State Project Manager assigned to the site. The interview summaries are attached to this report.

## **VII. Technical Assessment**

### **Question A: Is the remedy functioning as intended by the decision documents?**

The remedial actions at the site have failed to meet cleanup standards and there appears to be ongoing releases of contaminated groundwater to nearby surface water. The concentrations for some compounds appear to be increasing. Groundwater monitoring results indicate that several areas of the site continue to be impacted. The contaminant levels exceed Federal and State ARARs.

### **Question B: Are the exposure assumptions, toxicity data, cleanup levels, and remedial action objectives (RAOs) used at the time of the remedy selection still valid?**

Potential Federal ARARs of the ROD consist of the Clean Water Act, the Clean Air Act, National Ambient Air Quality Standard, and OSHA and DOT standards. Potential State ARARs include the groundwater standards and other appropriate sections of Part 201 and Part 31 of the Natural Resources and Environmental Protection Act (NREPA), 1994 PA 451, as amended.

With the exception of arsenic, neither Federal MCLs nor State groundwater standards have changed significantly since the time of the ROD, as amended. Federal and State standards for surface water quality and protection of aquatic life have not changed since the time of the ROD, as amended.

Toxicity and other factors for some contaminants of concern have not changed significantly except as discussed previously in this report under the section entitled, "Remedy Implementation." Changes in risk assessment methodologies since the time of the ROD do not significantly impact the protectiveness of the remedy.

Based upon a review of site information, it appears that all Federal and State environmental ARAR requirements for on-site activities identified in the ROD are being substantially complied with the exception that a final cover has not been placed on the southern portion of the site and the cleanup goals have not been achieved.

**Question C: Has any other information come to light that could call into question the protectiveness of the remedy?**

Monitoring data indicated that the concentrations of some contaminants have been increasing, contaminants of concern have been detected in Unnamed Ditch, and cleanup standards have not been met. These issues are more fully discussed in this report under the section entitled, "Data Review."

**VIII. Issues**

Construction activities at the Site are complete and the SVE system is no longer being operated and maintained, due to its inability to achieve cleanup goals. U.S. EPA is currently responsible for collecting and analyzing confirmatory soil samples. In the interest of conserving funding, U.S. EPA has delayed collecting these samples since the failure of the system has already been confirmed by other data collected by the PRPs.

The Consent Decree required the PRPs to maintain and operate as well as sample and analyze the SVE system for up to 5 years in an attempt to reach the cleanup standards. If after 5 years from the date of commencement of SVE (actual commencement date was December 2, 1998, therefore, end date for SVE is December 2, 2003) the cleanup standards for either the soil or groundwater water samples have not been attained for all contaminants then the Additional Work clause in the Consent Decree would become effective.

Under the Consent Decree, the PRPs are currently responsible for conducting the following activities at the Envirochem Site:

1. Monitoring surface water and groundwater in accordance with the schedule in the Consent Decree; and
2. Routine maintenance and repairs to maintain the integrity of the RCRA compliant cover over the northern portion of the site, security fencing, access controls, and institutional controls.

After December 2, 2003, the PRPs will also be required to conduct the following activities:

1. Installation of a RCRA compliant cover over the remaining portion over the southern portion of the site. This is required as part of the additional work due to the fact that confirmatory sampling, hot spot delineation, and observations of separate phase contamination in this area indicate that soils in excess of IDEM's RCRA closure standards remain in place; and
2. Installation of a groundwater water collection trench. Collection, proper treatment, and disposal of water from the trench.

The remedy has failed to achieve cleanup goals. Some of the groundwater monitoring well casings were found to be in poor condition. Large openings exist where the fence crosses drainage ditches and in areas of subsidence. Several areas of the fence were in need of maintenance or repair. Some of the damage to the fence appears to be related to the adjacent recycling and disposal operations.

## IX. Recommendations and Follow-Up Actions

Issue	Recommendations/Follow-up Actions	Party Responsible	Oversight Agency	Milestone Date	Affects Protectiveness? (Y/N)	
					Current	Future
Remedy Failure	Further remedial action is necessary	Trustees	U.S. EPA and IDEM	12-02-03	Y	Y
Fence	The openings in the fence should be repaired, all openings should be closed, vegetative growth should be removed, and protective bumpers or equivalent protective devices should be installed to protect the fence from the heavy equipment operating in the area.	Trustees	U.S. EPA and IDEM	12-02-03	N	Y
Fence and Signs	The fence and warning signs should be regularly inspected for integrity and repaired as necessary.	Trustees	U.S. EPA and IDEM	12-02-03	N	Y
Wells	The groundwater monitoring wells and casings should be inspected for integrity and repaired as necessary. Casings should be provided where missing and all casings should be locked.	Trustees	U.S. EPA and IDEM	12-02-03	N	Y

## X. Protectiveness Statement

The SVE treatment system is currently shutdown and the remedial actions at the site are not protective. The remedial actions at the site have failed to meet cleanup standards and there appears to be ongoing releases of contaminated groundwater to nearby surface water. Additional remedial action contemplated in the Consent Decree is necessary to ensure protectiveness. U.S. EPA and IDEM are negotiating the details of the additional remedial action with the Trustees who represent the PRPs for the site.

## **XI. Next Review**

The next five-year review for the Envirochem site is required by March 31, 2008, five years from the date of this review. Due to ongoing discussions regarding additional work for the site, an addendum to this review or an additional review may be prepared prior to the next required review.

## **Interview Records**

**INTERVIEW RECORD**

<b>Site Name:</b> Envirochem Site		<b>EPA ID No.:</b> 0530	
<b>Subject:</b> 5-Year Review Interview of Former Remedial Project Manager		<b>Time:</b>	<b>Date:</b> 2/27/03 and 3/10/03
<b>Type:</b> <input checked="" type="checkbox"/> Telephone <input type="checkbox"/> Visit <input checked="" type="checkbox"/> Other <b>Location of Visit:</b> Via e-mail and phone		<input type="checkbox"/> Incoming <input checked="" type="checkbox"/> Outgoing	
<b>Contact Made By:</b>			
<b>Name:</b> Matthew J. Ohl	<b>Title:</b> Remedial Project Manager	<b>Organization:</b> U.S.EPA, Region 5, Superfund Division	
<b>Individual Contacted:</b>			
<b>Name:</b> Michael McAteer	<b>Title:</b> Remedial Project Manager	<b>Organization:</b> U.S.EPA, Region 6, Superfund Division	
<b>Telephone No:</b> 214-665-7157 <b>Fax No:</b> 214-665-6660 <b>E-Mail Address:</b> mcateer.mike@epa.gov		<b>Street Address:</b> 1445 Ross Avenue, Suite 1200 <b>City, State, Zip:</b> Dallas, TX 75202-2733	
<b>Summary Of Conversation</b>  Mr. McAteer remarked that it was a long design and remediation process for a site of this size however, all of the work was very thorough. He believes the additional work required by USEPA is necessary for the remedy to achieve cleanup standards and be protective of public health and the environment.  During his tenure at the site, Mr. McAteer noticed that the community expressed little interest in the remedial action due in part to it's relative isolation from any municipality. Therefore, the impact on the surrounding community is minimal and there are no known community concerns.  Mr. McAteer is also not aware of any events, incidents, or activities at the site such as vandalism, trespassing, or emergency responses from local authorities.			

### INTERVIEW RECORD

**Site Name:** Envirochem Site

**EPA ID No.:** 0530

**Subject:** 5-Year Review Interview

**Time:**

**Date:** 2/28/03  
and 3/03/03

**Type:** ☐ Telephone ☒ Visit ☒ Other

☐ Incoming ☒ Outgoing

**Location of Visit:** On-site and via e-mail

#### Contact Made By:

**Name:** Matthew J. Ohl

**Title:** Remedial Project  
Manager

**Organization:** U.S.EPA,  
Region 5, Superfund Division

#### Individual Contacted:

**Name:** Michael Habeck

**Title:** State Project Manager

**Organization:** IDEM

**Telephone No:** 317-233-2991

**Fax No:**

**E-Mail Address:** mhabeck@dem.state.in.us

**Street Address:** 100 North Senate Avenue

**City, State, Zip:** Indianapolis, IN 46206-6015

#### Summary Of Conversation

Mr. Habeck is glad that the project is moving towards a remedy similar to the alternative remedy proposed some years ago. Staff at IDEM have apparently long been of the opinion that soil vapor extraction was not a particularly viable approach to remediation of the relatively tight soils at the site. Other technologies do not seem especially well-suited to eliminating the contamination either. That being the case, it seems best to move towards preventing further migration of contamination from the site, and the proposed interceptor trench should provide an acceptable means of doing so.

Mr. Habeck believes the site operations had minimal effects, if any on the surrounding community. Mr. Habeck is not aware of any community concerns regarding the site or its operation and administration.

Mr. Habeck is not aware of any events, incidents, or activities at the site such as vandalism, trespassing, or emergency responses from local authorities.

Mr. Habeck feels that IDEM has received an appropriate amount of information about the site. However, there are times when he and the technical staff who work with him would prefer that the PRPs would provide documents and meeting materials well before meetings take place. This would allow IDEM to offer more concrete comments on proposals during meetings. Mr. Habeck would also like to see greater use of conference calls instead of meetings.

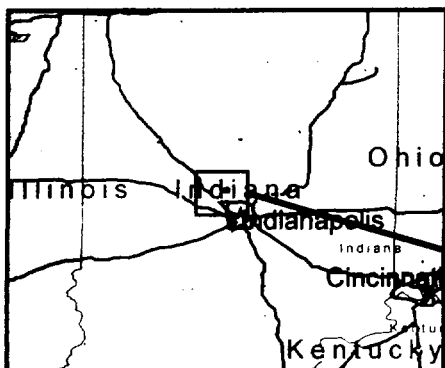
In regard to remedy selection and implementation, Mr. Habeck believes that long term monitoring of the proposed remedy for the site, while it may be inconvenient, expensive, and difficult to budget over time, is highly desirable.



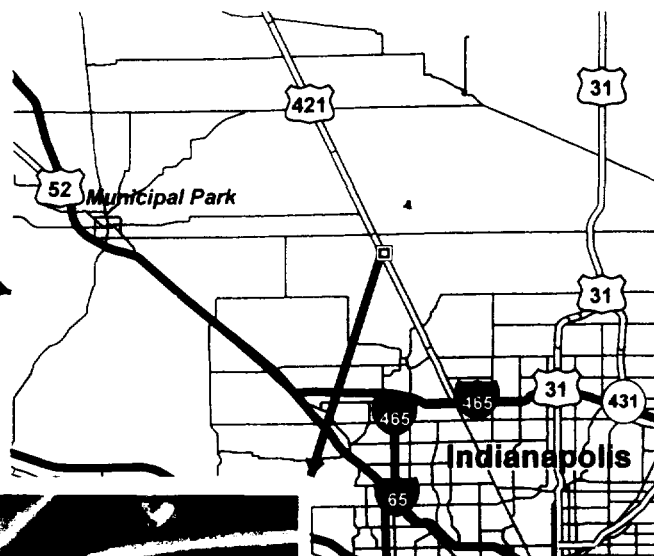


# Envirochem Superfund Site

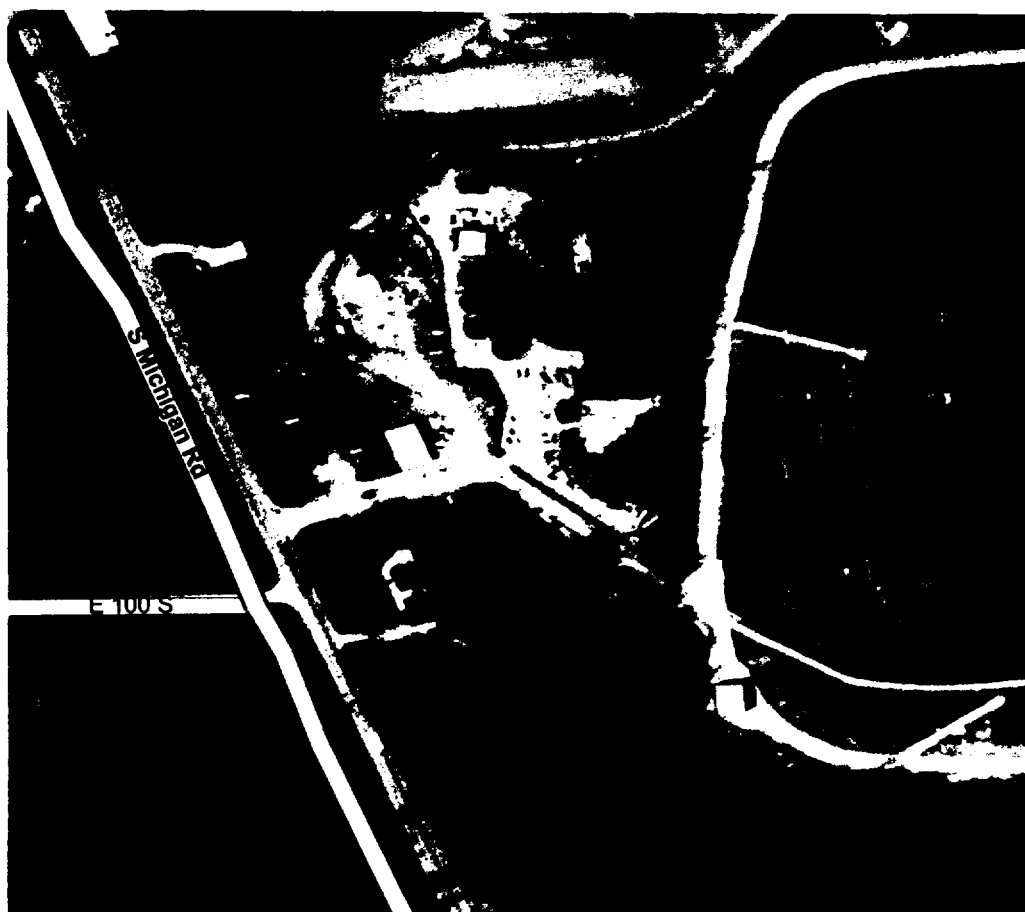
## 1) State



## 2) Boone County



## 3) Envirochem Site



8EPA United States  
Environmental Protection Agency

Region 5  
Indianapolis, Indiana

Plot created by David Wilson U.S. EPA Region 3/25/2003  
BW Image Date 5/16/2000

Figure 1

## Envrochem Superfund Site 3D Surface Terrain Model

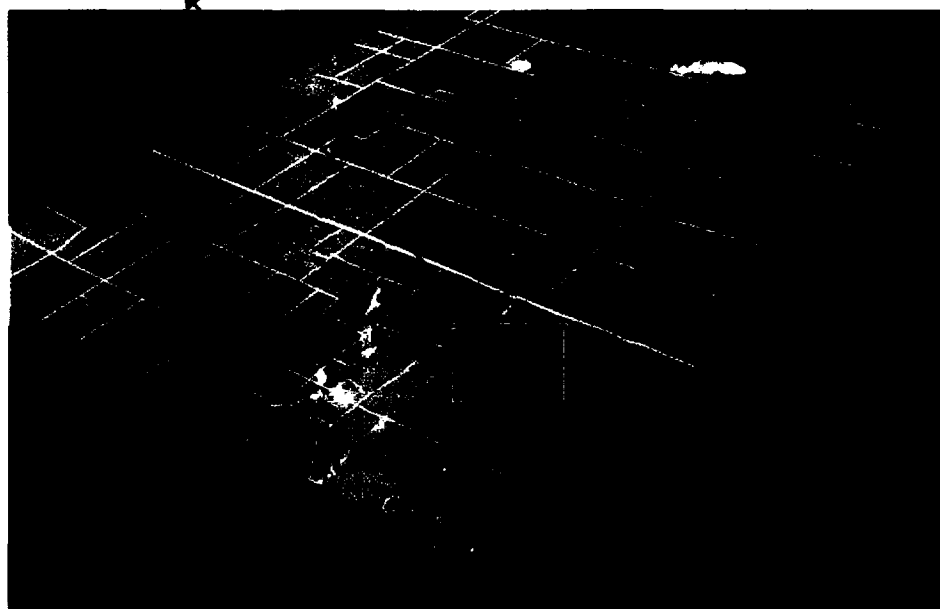


Figure 2

1	SUBSURFACE AND SURFACE WATER SAMPLING LOCATIONS	ENVIRON		
		700 MILLINGTON ROAD, SUITE 401, INDIANAPOLIS, IN 46216 PH: (317) 552-1000 FAX: (317) 552-1001 E: info@environ.com W: www.environ.com		
ECC SITE		05/14/02	1"-7" SCALE	2nd of 4 PAGE
ZIONSVILLE, INDIANA		S. HAYTER DESIGNED BY	APR DRAWN BY	RAJATHOOR APPROVED BY

## TABLES

Table 1

Analytical Results Above Table 3-1 Acceptable Concentrations from EnviroChem Samples (4th Qtr 1998 - 2nd Qtr 2002)  
EnviroChem Superfund Site, Zionsville, Indiana

Well Number	Compound Exceeding Acceptable Concentration	Table 3-1 Acceptable Concentration (ug/L)	Frequency of Exceedance	Range of Exceedance Concentration(s) (ug/L)	Observed Apparent Trends/Significance	
ONSITE TILL WELLS						
T-1	Tetrachloroethene	0.69	5 / 8	63%	0.7 - 14	only high value in 2nd Qtr 1999
	Trichloroethene	5	1 / 8	13%	22	only exceedance in 2nd Qtr 1999
	Vinyl Chloride	2	1 / 8	13%	2	recent
	Bis (2-ethylhexyl) phthalate	2.5	2 / 8	25%	4 - 7	sporadic
T-22A	Acetone	3500	3 / 6	50%	10,000 - 28,000	recent increase (3rd Qtr 2001 to 1st Qtr 2002)
	1,1-Dichloroethene	7	4 / 6	67%	82 - 3,100	latest round (1st Qtr 2002) was highest
	1,2-Dichloroethene (total)	70	5 / 6	83%	580 - 4,200	high in 2nd Qtr 1999, but recent increase probable
	Ethylbenzene	680	3 / 6	50%	720 - 1,900	highest in 2nd Qtr 1999
	Methylene Chloride	4.7	5 / 6	83%	1,600 - 71,000	highest in 2nd Qtr 1999
	Methyl ethyl ketone	170	3 / 6	50%	1,100 - 8,400	latest round (1st Qtr 2002) was highest
	Methyl isobutyl ketone	1750	2 / 6	33%	2,700 - 12,000	highest in 2nd Qtr 1999
	Tetrachloroethene	0.69	6 / 6	100%	17,000 - 110,000	latest round (1st Qtr 2002) was highest
	Toluene	2000	5 / 6	83%	2,400 - 22,000	highest in 2nd Qtr 1999
	1,1,1 - Trichloroethane	200	6 / 6	100%	6400 - 91,000	
	1,1,2 - Trichloroethane	0.61	2 / 6	33%	77 - 1,900	
	Trichloroethene	5	6 / 6	100%	6,000 - 190,000	high in 2nd Qtr 1999, then fluctuating 15,000-50,000
	Vinyl Chloride	2	1 / 6	17%	20	only exceedance in 4th Qtr 2000
	Bis (2-ethylhexyl) phthalate	2.5	3 / 6	50%	41 - 8,000	highest in 2nd Qtr 1999
	1,2-Dichlorobenzene	600	2 / 6	33%	6900 - 77,000	highest in 2nd Qtr 1999
	Isoprene	8.5	3 / 6	50%	21 - 390	high in 4th Qtr 1998, but recent increases
	Naphthalene	14000	1 / 6	17%	18000	only exceedance in 2nd Qtr 1999
T-3	1,2-Dichloroethene (total)	70	8 / 8	100%	3,000 - 9,040	fluctuating concentrations
	Methylene Chloride	4.7	4 / 8	50%	5 - 270	nothing recent
	Tetrachloroethene	0.69	5 / 8	63%	9 - 130	high in 4th Qtr 2000
	1,1,2-Trichloroethene	0.61	4 / 8	50%	2 - 3	consistent concentrations
	Trichloroethene	5	5 / 8	63%	15 - 70	fluctuating concentrations
	Vinyl Chloride	2	8 / 8	100%	160 - 900	tripled in latest round to highest (1st Qtr 2002)
	Bis (2-ethylhexyl) phthalate	2.5	5 / 8	63%	9 - 100	large increase in latest round (1st Qtr 2002)
	Aroclor-1260	0.0045	1 / 8	13%	29	only exceedance in 2nd Qtr 1999
T-4A	Tetrachloroethene	0.69	1 / 8	13%	4	only exceedance in 4th Qtr 1998
	Trichloroethene	5	1 / 8	13%	5	only exceedance in 4th Qtr 1998
	Bis (2-ethylhexyl) phthalate	2.5	4 / 8	50%	3 - 13	fluctuating concentrations
	Chromium VI	50	1 / 8	13%	113	only exceedance in 2nd Qtr 2000
OFFSITE TILL WELLS						
T-5	Arsenic	0.0175	5 / 10	50%	1.9 - 3.9	sporadic, but consistent, concentrations
	Chromium VI	11	1 / 10	10%	100	
	Zinc	47	1 / 10	10%	114	only exceedance in 4th Qtr 1999
T-6	1,1-Dichloroethene	1.85	3 / 12	25%	4 - 37	re-exceedance in latest round (2nd Qtr 2002)
	1,2-Dichloroethene (total)	1.85	12 / 12	100%	6,900 - 71,300	recent exceedances are lower (11,000-14,000)
	Methylene Chloride	15.7	6 / 12	50%	97 - 1,500	high in 2nd Qtr 1999, nothing recent
	Toluene	3400	3 / 12	25%	3,800 - 4,300	sporadic, but consistent, concentrations
	Vinyl Chloride	525	10 / 12	83%	1,100 - 17,000	average conc. increased 10-fold in 2000
	Phenol	570	1 / 12	8%	870	only exceedance in 4th Qtr 1998
	Aroclor-1232	0.000079	1 / 12	8%	3.2	only exceedance in 3rd Qtr 2001
	Aroclor-1260	0.000079	1 / 12	8%	4.7	latest round, but resampled as undetected
	Arsenic	0.0175	12 / 12	100%	25.9 - 139	high in 3rd Qtr 2001, else fluctuating
	Chromium VI	11	2 / 12	17%	13.4 - 17.6	sporadic, but consistent, concentrations
T-7	Zinc	47	1 / 12	8%	200	only exceedance in 1st Qtr 1999
	1,2-Dichloroethene (total)	1.85	12 / 12	100%	9 - 123	latest round was lowest
	Aroclor-1242	0.000079	1 / 12	8%	4.6	latest round, but resampled as undetected
	Aroclor-1260	0.000079	1 / 12	8%	4.2	latest round, but resampled as undetected
	Arsenic	0.0175	1 / 12	8%	3.5	only exceedance in 4th Qtr 1998
T-8	1,2-Dichloroethene (total)	1.85	9 / 12	75%	1 - 10	slowly decreasing concentrations
	Arsenic	0.0175	1 / 12	8%	2	only exceedance in 2nd Qtr 1999
T-9	1,2-Dichloroethene (total)	1.85	6 / 10	60%	12 - 110	low at 3rd Qtr 1999, then steady since 2nd Qtr 2000
	Vinyl Chloride	525	0 / 10	0%		possible increasing trend towards exceedance
	Arsenic	0.0175	4 / 10	40%	2.1 - 7.6	sporadic, but consistent, concentrations
	Chromium VI	11	1 / 10	10%	99.9	only exceedance in 2nd Qtr 2000
	Zinc	47	2 / 10	20%	18 - 190	only exceedances in 1st & 2nd Qtr 1999
T-10	1,2-Dichloroethene (total)	1.85	10 / 10	100%	19.4 - 930	high in 4th Qtr 1998, but steady recently at 200-400
	Methylene Chloride	15.7	1 / 10	10%	50	only exceedance in 4th Qtr 1998
	Tetrachloroethene	8.85	1 / 10	10%	15	first exceedance in latest round
	Arsenic	0.0175	6 / 10	60%	1.7 - 14.3	recent increase (1st Qtr 2001 to latest: 1st Qtr 2002)
	Chromium VI	11	2 / 10	20%	13.2 - 156	sporadic
	Zinc	47	2 / 10	20%	67.3 - 192	nothing recent
OFFSITE SAND WELLS						
S-1	Arsenic	0.0175	2 / 10	20%	1.4 - 1.8	sporadic
	Chromium VI	11	1 / 10	10%	15.1	only exceedance in 2nd Qtr 2000
S-2	1,2-Dichloroethene (total)	1.85	3 / 12	25%	2 - 3	sporadic, but nothing recent
	Arsenic	0.0175	1 / 12	8%	1.9	only exceedance in 3rd Qtr 2001
S-3	Arsenic	0.0175	1 / 10	10%	4.4	only exceedance in 2nd Qtr 1999
	Vinyl Chloride	525	0 / 10	0%		possible increasing trend, but low detections
S-4/4A	1,2-Dichloroethene (total)	1.85	9 / 10	90%	36 - 200	recent increase in latest round
	Vinyl Chloride	525	0 / 10	0%		possible increasing trend, but low detections
	Aroclor-1254	0.000079	1 / 10	10%	0.11	only exceedance in 4th Qtr 2000
	Arsenic	0.0175	2 / 10	20%	2 - 2.5	only exceedances in 1999
	Chromium VI	11	1 / 10	10%	11.2	only exceedance in 2nd Qtr 2000
ECC MW-13	1,2-Dichloroethene (total)	1.85	5 / 12	42%	2.3 - 46	nothing recent
	Arsenic	0.0175	12 / 12	100%	3 - 26.8	fluctuating concentrations
SURFACE WATER	Chromium VI	11	1 / 12	8%	13.3	only exceedance in 1st Qtr 2001
SW-1	Arsenic	0.0175	1 / 10	10%	2.9	sporadic
	Cyanide	5.2	1 / 10	10%	10.3	only exceedance in 2nd Qtr 1999
SW-2	1,2-Dichloroethene (total)	1.85	3 / 10	30%	2 - 5	recent exceedances (1st Qtr 2001-1st Qtr 2002)
	Arsenic	0.0175	2 / 10	20%	2.1 - 4.6	sporadic, including latest round
	Cyanide	5.2	1 / 10	10%	7.1	sporadic

TABLE 2

[illegible]



## **Attachment A: Discussion and Presentation of Table 1**

### **Onsite Till Wells**

Well T-1: Three VOCs and one SVOC exceeded the acceptable concentrations. The vinyl chloride result from a recent sampling event (3<sup>rd</sup> Quarter 2001) met the acceptable concentration and could possibly indicate an increasing trend.

Well T-2/2A: This well location represents the greatest number of compounds exceeding the acceptable concentrations of any of the sampling locations: 13 VOCs and 4 SVOCs. Six of these VOCs exceeded the acceptable concentrations in at least five of the six sampling events, and five of these VOCs - acetone, 1,1-dichloroethene (1,1-DCE), 1,2-DCE total, methyl ethyl ketone and tetrachloroethene (PCE) - have recent indications of possible increasing trends.

Well T-3: Six VOCs, one SVOC and one Polychlorinated Biphenyl (PCB) have exceeded the acceptable concentrations (two of the VOCs - 1,2-DCE total and vinyl chloride - in all eight sampling events). Vinyl chloride and the SVOC - bis(2-ethylhexyl)phthalate - have recent indications of possible increasing trends.

Well T-4: Two VOCs, one SVOC and one metal have had concentrations exceeding the acceptable concentrations, but none of them have indications of increasing trends.

### **Offsite Till Wells**

Well T-5: Three metals have had concentrations exceeding the acceptable concentrations, but none of them have indications of increasing trends.

Well T-6: This well location represents the greatest number of compounds exceeding the acceptable concentrations of any of the offsite locations: five VOCs, one SVOC, two PCBs and three metals. Two of the VOCs and one of the metals exceeded the acceptable concentrations in at least ten of the twelve sampling events, and two of these VOCs - 1,1-dichloroethene and vinyl chloride - have recent indications of possible increasing trends. 1,1-DCE is an abiotic breakdown product of 1,1,1-TCA, while vinyl chloride is a biological breakdown product of 1,2-DCE total. Both 1,1,1-TCA and 1,2-DCE total are found in onsite till wells.

Well T-7: One VOC, two PCBs and one metal have had concentrations exceeding the acceptable concentrations, with the VOC - 1,2-DCE total - exceeding the acceptable concentrations in all twelve sampling events. None of the compounds have indications of increasing trends.

Well T-8: One VOC and one metal have had concentrations exceeding the acceptable concentrations. The VOC - 1,2-DCE total - exceeded the acceptable concentrations in nine of the twelve sampling events, but has concentrations indicating a steady, consistent decreasing trend to levels below the acceptable concentration.

Well T-9: One VOC and three metals have exceeded the acceptable concentrations. 1,2-DCE total has had steady concentrations above acceptable concentrations since 1<sup>st</sup> Quarter 2000. Vinyl chloride has not had concentrations above the acceptable concentration, but recent concentrations indicate an increasing trend towards exceedance.

Well T-10: Three VOCs and three metals have had concentrations exceeding the acceptable concentrations, with one of the VOCs - 1,2-DCE total - exceeding the acceptable concentrations in all ten sampling events. One of the other VOCs - PCE - had its first exceedance in the latest sampling event.



## **Offsite Sand Wells**

Well S-1: Two metals have had concentrations exceeding the acceptable concentrations, but none of them have indications of increasing trends.

Well S-2: One VOC and one metal have had concentrations exceeding the acceptable concentrations, but none of them have indications of increasing trends.

Well S-3: One metal – arsenic - has had a single concentration exceeding the acceptable concentrations, but not in a recent sampling event. Vinyl chloride has not had concentrations above the acceptable concentration, but recent concentrations indicate an increasing trend.

Well S-4/4A: One VOC, one PCB and two metals have exceeded the acceptable concentrations. The VOC - 1,2-DCE total - has had concentrations above acceptable concentrations in nine of the ten sampling events and has shown an increase in concentration in the latest sampling event. Vinyl chloride has not had concentrations above the acceptable concentration, but recent concentrations indicate an increasing trend.

ECC MW-13: One VOC and two metals have exceeded the acceptable concentrations. One of the metals - arsenic - has had concentrations above acceptable concentrations in all twelve of the sampling events. There are no indications of increasing trends.

## **Surface Water**

SW-1: Two metals have had only a single concentration each exceeding the acceptable concentrations.

SW-2: One VOC and two metals have exceeded the acceptable concentrations. The exceedances for the VOC - 1,2-DCE total – have all been in the recent sampling events, possibly indicating an increasing trend.

B

## **Attachment B: Table 3-1 from Revised Exhibit A of the Consent Decree**

---

**TABLE 3-1**  
**SITE-SPECIFIC ACCEPTABLE CONCENTRATIONS**  
**ENVIROCHEM SUPERFUND SITE**  
**ZIONSVILLE, INDIANA**

(Page 1 of 4)

Parameter	Acceptable Subsurface Water Concentration <sup>1,2</sup> (ug/L)	Acceptable Stream Concentration <sup>3,4</sup> (ug/L)	Acceptable Soil Concentration <sup>5,6</sup> (ug/kg)
<b>Volatile Organic Compounds</b>			
Acetone	3,500 RB		2,196
1,1-Dichloroethene	7 MCL	1.85	762
1,2-Dichloroethene(total)	70 MCL	1.85	5,782
Ethyl benzene	680 MCL	3,280	207,464
Methylene chloride	4.7 RB	15.7	126
Methyl ethyl ketone	170 LDWHA		352
Methyl isobutyl ketone	1,750 RB		18,200
Tetrachloroethene	0.69 RB	8.85	77
Toluene	2,000 MCL	3,400	546,134
1,1,1-Trichloroethane	200 MCL	5,280	47,871
1,1,2-Trichloroethane	0.61 RB	41.8	71
Trichloroethene	5 MCL	80.7	812
Vinyl chloride	2 MCL	525	8.3
Total Xylenes	10,000 MCL		5,596,192
<b>Semivolatile Organic Compounds</b>			
bis(2-ethylhexyl)phthalate	2.5 RB	50,000	
Di-n-butyl phthalate	3,500 RB	154,000	
1,2-Dichlorobenzene	600 MCL	763	370,160
Diethyl phthalate	28,000 RB	52,100	
Isophorone	8.5 RB		
Naphthalene	14,000 RB	620	
Phenol	1,400 RB	570	51,680

**TABLE 3-1**  
**SITE-SPECIFIC ACCEPTABLE CONCENTRATIONS**  
**ENVIROCHEM SUPERFUND SITE**  
**ZIONSVILLE, INDIANA**  
*(Page 2 of 4)*

Parameter	Acceptable Subsurface Water Concentration <sup>1,2</sup> (ug/L)	Acceptable Stream Concentration <sup>3,4</sup> (ug/L)	Acceptable Soil Concentration <sup>5,6</sup> (mg/kg)
<b>Inorganics</b>			
Antimony	14 RB		<sup>a</sup>
Arsenic	50 MCL (10)	0.0175 (10)	
Barium	1,000 MCL		
Beryllium	4 MCL		
Cadmium	10 MCL		
Chromium VI	50 MCL	11	
Lead	50 MCL	10	
Manganese	7,000 RB		
Nickel	150 LDWHA	100	
Silver	50 MCL		
Tin	21,000 RB		
Vanadium	245 RB		
Zinc	7,000 RB	47	
Cyanide	154 LDWHA	5.2	
Polychlorinated biphenyls	0.0045 RB (7)	0.000079 (7,8)	

**Notes:**

<sup>1</sup> RB = Risk-based standard. U.S. EPA, Risk Assessment Guidance for Superfund: Volume I - Human Health Evaluation Manual (Part B, Development of Risk-based Preliminary Remediation Goals), December 1991.

EPA = Letter from Michael McAteer of United States Environmental Protection Agency to the Enviro-Chem Trustees, October 12, 1995.

MCL = Drinking water Maximum Contaminant Level. 40 CFR 141

LDWHA = Lifetime drinking water health advisory. U.S. EPA, Superfund Public Health Evaluation Manual update of November 16, 1987.

TABLE 3-1  
SITE-SPECIFIC ACCEPTABLE CONCENTRATIONS  
ENVIROCHEM SUPERFUND SITE  
ZIONSVILLE, INDIANA  
(Page 3 of 4)

Notes: (continued)

<sup>2</sup> In the event that higher concentrations than those set forth for any parameter in this column are present in the upgradient subsurface water in the till and/or sand and gravel according to the procedure specified below, then those higher upgradient subsurface water concentrations and not the values set forth in this table shall constitute the Acceptable Subsurface Water Concentrations within the meaning of this Exhibit A and the Consent Decree. Those upgradient subsurface water concentrations are referred to in this Exhibit A as "Applicable Subsurface Water Background Concentrations." Twelve subsurface water samples will be taken from existing or new well locations, approved by EPA, over at least a 12-month period in areas upgradient of the site. The exact procedure, location of wells, and schedule for collecting and analyzing the samples will be approved by EPA, after consultation with the state, prior to its implementation. Subsurface samples for inorganics and PCB analysis will be filtered. For each parameter, the analytical results from the 12 samples will be analyzed using standard statistical procedures. The mean and standard deviation will be calculated, and all nondetects will be assigned a value equal to 1/2 the EPA-approved quantification limit. For purposes of this Document, "Applicable Subsurface Water Background Concentrations" is defined as two (2) standard deviations above the calculated mean of these 12 samples.

<sup>3</sup> Stream Criteria, from Table 1 of the Record of Decision for the site, September 25, 1987 (or calculated on the same basis).

<sup>4</sup> In the event that higher concentrations than those set forth for any parameter in this column are present in the upstream surface water, then those higher upstream concentrations and not the values set forth in this table shall constitute the Acceptable Stream Concentrations within the meaning of this Exhibit A and the Consent Decree. Those higher upstream surface water concentrations are referred to in this Exhibit A as "Applicable Surface Water Background Concentrations." Twelve surface water samples will be taken from Unnamed Ditch upstream of the site over at least a 12 month period. The exact procedure, location of samples, and schedule for collecting and analyzing the samples will be approved by EPA, after consultation with the state, prior to its implementation. For each parameter, the analytical results from the 12 samples will be analyzed using standard statistical procedures. The mean and standard deviation will be calculated, and all nondetects will be assigned a value equal to 1/2 the EPA-approved quantification limit. For purposes of this document, "Applicable Surface Water Background Concentrations" is defined as two (2) standard deviations above the calculated mean of these 12 samples.

<sup>5</sup> Acceptable Soil Concentration is based on ingestion of subsurface water at the site boundary, assuming a dilution of leachate to subsurface water of 1:196 (Appendix B).

TABLE 3-1  
SITE-SPECIFIC ACCEPTABLE CONCENTRATIONS  
ENVIROCHEM SUPERFUND SITE  
ZIONSVILLE, INDIANA  
(Page 4 of 4)

Notes: (continued)

- <sup>6</sup> The Acceptable Soil Concentrations, within the meaning of this Exhibit A and the Consent Decree, will be achieved when the arithmetic average of the soil sample results for each parameter, assigning all nondetect results a value of 1/2 the detection limit, do not exceed the values set forth in this table by more than 25%.
- <sup>7</sup> So long as the EPA-approved quantification limit for PCBs in water is above the acceptable subsurface water and stream concentrations for PCBs, compliance with the Acceptable Subsurface and Stream Concentrations for PCBs will be determined as follows: all subsurface and surface water sample results for PCBs must be below the EPA-approved quantification limit for PCBs (at the time compliance is determined).
- <sup>8</sup> Modified from Superfund Public Health Evaluation Manual, October, 1986, EPA 4/540/1-86/060, OSWER Directive 9285.4 1.
- <sup>9</sup> Revised Site-Specific Acceptable Soil Concentrations were calculated in accordance with the procedures in Appendix B of Exhibit A using updated Acceptable Subsurface Water Concentrations (shaded) and the  $f_{90}$  value corresponding to the 90% lower confidence limit of the mean of the TOC values from the TOC Investigation.
- <sup>10</sup> So long as the EPA-approved quantification limit for arsenic in water is above the acceptable subsurface water and stream concentrations for arsenic, compliance with the Acceptable Subsurface and Stream Concentrations for arsenic will be determined as follows: all subsurface and surface water sample results for arsenic must be below the EPA-approved quantification limit for arsenic (at the time compliance is determined).





## **Attachment C: Tables B-1 through B-17**

---

4

**TABLE B-1**  
**Summary of Analytical Results for Monitoring Well T-1**  
**ECC Superfund Site**

LOCATION	Acceptable	T-1	T-1	T-1	T-1	T-1	T-1	T-1	T-1
ENVIRON SAMPLE ID	Subsurface Water	ECTGW1-01	ECTGW-03	ECTGW1-05	ECTGW1-06	ECTGW1-07	ECTGW1-08	ECTGW1-09	ECTGW1-11
SAMPLING QUARTER	Concentration	4th 1998	2nd 1999	4th 1999	2nd 2000	4th 2000	1st 2001	3rd 2001	1st 2002
<b>Volatile Organics</b>									
Acetone	[3,500]	2 U	2 U	1.0 J	2 U	5 U	5 U	2 J	5 U
1,1-Dichloroethene	[7]	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U
1,2-Dichloroethene (total)	[70]	0.4 JB	0.5 U	0.8	0.1 J	0.3 J	0.2 J	0.2 J	1 U
Ethylbenzene	[680]	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U
Methylene Chloride	[156.6]	2 B	1	0.8	1 B	0.8 J	2 U	2 U	2 U
Methyl ethyl ketone	[170]	2 U	2 U	1.0 J	2 U	5 U	5 U	5 U	5 U
Methyl isobutyl ketone	[1,750]	2 U	2 U	2.0 U	2 U	5 U	5 U	5 U	5 U
Tetrachloroethene	[5.0]	1	14	0.6	0.7	1 U	1 U	1	0.9 J
Toluene	[2,000]	0.5 U	2	0.3 J	0.2 J	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	[200]	0.5 U	9	0.5 U	0.5 U	1 U	1 U	1 U	0.2 J
1,1,2 Trichloroethane	[5.0]	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U
Trichloroethene	[6.4]	0.5 U	22	0.4 J	4 J	0.3 J	0.3 J	0.9 J	1
Vinyl Chloride	[5.0]	0.5 U	0.4 J	0.5 U	0.6	1	1 U	2	1 U
Xylenes (total)	[10,000]	0.4 JB	0.6	0.5 U	0.5 U	1 U	1 U	1 U	1 U
<b>Semi-Volatile Organics</b>									
Bis (2-ethylhexyl) phthalate	[7.1]	10 U	2 J	4.0 J	0.9 J	2 J	1 JB	7 J	10 U
Di-n-butyl phthalate	[3,500]	10 U	11 U	9.0 U	9 U	11 U	10 U	10 U	10 U
1,2-Dichlorobenzene	[600]	10 U	11 U	9.0 U	9 U	1 U	1 U	1 U	1 U
Diethylphthalate	[28,000]	10 U	11 U	9.0 U	9 U	11 U	10 U	10 U	10 U
Isoprene	[8.5]	10 U	11 U	9.0 U	9 U	11 U	10 U	10 U	10 U
Naphthalene	[14,000]	10 U	11 U	9.0 U	9 U	11 U	10 U	10 U	10 U
Phenol	[1,400]	16	11 U	9.0 U	9 U	11 U	10 U	10 U	10 U
<b>Polychlorinated biphenyls</b>									
Aroclor-1016	[0.5]	1 U	0.51 U	0.5 U	0.49 U	1.0 U	1.0 U	1 U	1 U
Aroclor-1221	[1.0]	2 U	1.0 U	1.0 U	0.98 U	2.0 U	2.0 U	2 U	2 U
Aroclor-1232	[0.5]	1 U	0.51 U	0.5 U	0.49 U	1.0 U	1.0 U	1 U	1 U
Aroclor-1242	[0.5]	1 U	0.51 U	0.5 U	0.49 U	1.0 U	1.0 U	1 U	1 U
Aroclor-1248	[0.5]	1 U	0.51 U	0.5 U	0.49 U	1.0 U	1.0 U	1 U	1 U
Aroclor-1254	[0.5]	1 U	0.51 U	0.5 U	0.49 U	1.0 U	1.0 U	1 U	1 U
Aroclor-1260	[0.5]	1 U	0.51 U	0.5 U	0.49 U	1.0 U	1.0 U	1 U	1 U
<b>Inorganics</b>									
Antimony	[46.5]	1.7 U	1.0 U	NA	3.1 B	2.4 B	2.5 U	1.7 U	1.5 U
Arsenic	[50]	3.6 B	2.1 B	7.6 U	2.1 U	3.4 U	4.2 U	3.5 B	1.7 U
Barium	[1,000]	425	587	NA	398	344	353	287	322
Beryllium	[4]	1 U	0.61 B	NA	0.10 U	0.2 U	0.1 U	0.40 U	0.4 U
Cadmium	[10]	1 U	0.57 B	0.30 U	0.30 U	0.3 U	0.60 U	0.40 U	0.10 U
Chromium VI	[50]	10 U	10 U	10.0 U	160	10 U	10 U	10 U	1 U
Lead	[50]	0.7 U	1.0 U	1.5 U	1.1 U	2.1 U	1.7 U	1.8 U	1.6 U
Manganese	[7,000]	115	103	NA	125	262	204	234	117
Nickel	[150]	0.7 U	3.1 B	1.1 U	3.2 U	1.6 B	1.3 U	1.4 U	1 U
Silver	[50]	0.4 U	0.4 U	NA	0.50 U	0.4 U	0.50 U	0.50 U	0.50 U
Tin	[21,000]	4.7 U	2.0 U	NA	2.8 U	6.1 U	9.0 U	3.7 U	2.6 U
Vanadium	[245]	0.51 B	0.4 U	NA	0.74 B	0.7 U	0.70 U	0.60 U	1.7 U
Zinc	[7,000]	1.5 U	39.6	3.1 U	9.6 B	1.2 U	1.1 U	0.70 U	4.6 U
Cyanide	[154]	10 U	4.7 U	8.2 U	0.90 U	0.9 U	0.60 U	0.80 U	1.3 B

Notes:

All concentrations are in ug/L.

Concentrations in bold exceed the Revised Site Specific Acceptable Subsurface Water Concentrations as presented in the December 22, 2000 Background Report.

(2)- Revised Site-Specific Acceptable Subsurface Concentrations as determined in the Background Surface and Subsurface Water Monitoring Report dated December 22, 2000, table 6 values.

U = Analyte not detected. The value shown is the associated detection limit.

B = Analyte was also detected in the laboratory method blank (organic) or analyte value is < contract required detection limit but >= instrument detection limit (inorganic).

J = Estimated value.

NA = Sample was not analyzed due to laboratory error.

**TABLE B-2**  
**Summary of Analytical Results for Monitoring Well T-2 and T-2A**  
**ECC Superfund Site**

LOCATION ENVIRON SAMPLE ID SAMPLING QUARTER	Acceptable Subsurface Water Concentration	T-2 ECTGW2-01 4th 1998	T-2 ECTGW-03 2nd 1999	T-2A ECTGW2-07 4th 2000	T-2A ECTGW2-08 1st 2001	T-2A ECTGW2-09 3rd 2001	T-2A ECTGW2-11 1st 2002
<b>Volatile Organics</b>							
Acetone	[3,500]	10,000 B	12,000 U	3,000	1,800	20,000	28,000
1,1-Dichloroethene	[7]	1,900 U	1,900 J	800	82	3,600 U	3,100
1,2-Dichloroethene (total)	[70]	1,900 U	4,200	1,444	580	890 J	1,000 J
Ethylbenzene	[680]	1,900 U	1,900 J	800	200	3,600 U	720 J
Methylene Chloride	[136.6]	12,000 B	71,000	6,100	1,600 DJ	7,200 U	2,800 J
Methyl ethyl ketone	[170]	2,200 J	12,000 U	2,000 U	1,100 <sup>a</sup>	18,000 U	8,400 J
Methyl isobutyl ketone	[1,750]	2,700 J	12,000 JB	2,000 U	230 J	18,000 U	13,000 U
Tetrachloroethene	[5.0]	17,000	79,000 D	53,000	17,000 DB	18,000	110,000 D
Toluene	[2,000]	3,600	22,800	8,800	2,400 D	1,200 J	7,000
1,1,1-Trichloroethane	[200]	31,000	91,000 D	30,000	6,400 D	6,800	28,000
1,1,2 Trichloroethane	[5.0]	1,900 U	2,500 U	77	50 U	3,600 U	2,500 U
Trichloroethene	[6.4]	6,000	190,000 D	50,000	15,000 DB	17,000	49,000
Vinyl Chloride	[5.0]	1,900 U	2,500 U	20	50 U	3,600 U	2,500 U
Xylenes (total)	[10,000]	1,900 U	8,900	2,900	830	3,600 U	3,100
<b>Semi-Volatile Organics</b>							
Bis (2-ethylhexyl) phthalate	[7.1]	1,300	8,000 J	2.5 U	2 JB	10 U	41
Di-n-butyl phthalate	[3,500]	59 J	10,000 U	10 U	10 U	10 U	0.7 J
1,2-Dichlorobenzene	[600]	6,900	77,000	64.6	68	3,600 U	360 J
Diethylphthalate	[28,000]	500 U	10,000 U	10 U	10 U	2 J	4 J
Isoporene	[8.5]	390 J	10,000 U	8.3 U	10 U	21	57
Naphthalene	[14,000]	410 J	18,000 J	10 U	1 J	3 J	13
Phenol	[1,400]	200	10,000 U	10 U	7 J	5 J	12
<b>Polychlorinated biphenyls</b>							
Aroclor-1016	[0.5]	1 U	1.3 U	0.8 U	1 U	1 U	1 U
Aroclor-1221	[1.0]	2 U	2.3 U	0.8 U	2 U	2 U	2 U
Aroclor-1232	[0.5]	1 U	1.3 U	0.8 U	1 U	1 U	1 U
Aroclor-1242	[0.5]	1 U	1.3 U	0.8 U	1 U	1 U	1 U
Aroclor-1248	[0.5]	1 U	1.3 U	0.8 U	1 U	1 U	1 U
Aroclor-1254	[0.5]	1 U	1.3 U	0.8 U	1 U	1 U	1 U
Aroclor-1260	[0.5]	1 U	1.3 U	0.8 U	1 U	1 U	1 U
<b>Inorganics</b>							
Antimony	[46.5]	1.7 U	4.4 B	100 U	2.5 U	1.7 U	1.5 U
Arsenic	[50]	6.4 B	8.1 B	20 U	4.2 U	6.2 B	1.7 B
Barium	[1,000]	184	852	130	108 B	97.2 B	111 B
Beryllium	[4]	0.2 U	0.35 B	NA	0.20 B	0.40 B	0.30 U
Cadmium	[10]	1.1	1.9 B	5 U	0.60 U	0.40 U	0.30 U
Chromium VI	[50]	10 U	10 U	10 U	NA	13.14	10 U
Lead	[50]	0.7 U	1.0 U	50 U	1.7 U	1.8 U	1.6 U
Manganese	[7,000]	21	1.1 B	250	360	324	258
Nickel	[150]	2 B	3.8 B	10 U	17.7 B	8.6 B	6.2 B
Silver	[50]	0.4 U	0.4 U	10 U	0.50 U	0.50 U	0.50 U
Tin	[21,000]	4.7 U	33.5	NA	9.0 U	3.7 U	2.6 U
Vanadium	[245]	1.2 B	3.1 B	50 U	3.8 B	0.60 U	1.7 U
Zinc	[7,000]	1.5 U	1.1 B	10 U	23.5	35.1	4.6 U
Cyanide	[154]	10 U	4.7 U	NA	0.60 U	0.80 U	0.80 U

Notes:

All concentrations are in ug/L.  
Concentrations in bold exceed the Revised Site Specific Acceptable Subsurface Water Concentrations as presented in the December 22, 2000 Background Report.

[2] = Revised Site-Specific Acceptable Subsurface Concentrations as determined in the Background Surface and Subsurface Water Monitoring Report dated December 22, 2000, Table 6 values.

U = Analyte not detected. The value shown is the associated detection limit.

B = Analyte was also detected in the laboratory method blank (organic) or analyte value is <contract required detection limit but >= instrument detection limit (inorganic).

NA = Sample was not analyzed due to laboratory error.

J = Estimated value.

D = Sample quantitated on a diluted sample.

**TABLE B-3**  
**Summary of Analytical Results for Monitoring Well T-3**  
**ECC Superfund Site**

LOCATION ENVIRON SAMPLE ID SAMPLING QUARTER	Acceptable Subsurface Water Concentration	T-3 ECTGW3-01 4th 1998	T-3 ECTGW-03 2nd 1999	T-3 ECTGW3-05 4th 1999	T-3 ECTGW3-06 2nd 2000	T-3 ECTGW3-07 4th 2000	T-3 ECTGW3-08 1st 2001	T-3 ECTGW3-09 3rd 2001	T-3 ECTGW3-11 1st 2002
<b>Volatile Organics</b>									
Acetone	[3,500]	550 JB	780 U	22 B	2 U	20	10	44	840 U
1,1-Dichloroethene	[7]	160 U	160 U	4.0	3	5 U	2	3	170 U
1,2-Dichloroethene (total)	[70]	<b>5,200</b>	<b>5,780</b>	<b>6,400 D</b>	<b>3,800 D</b>	<b>9,040</b>	<b>4,100 D</b>	<b>3,000 D</b>	<b>5,100</b>
Ethylbenzene	[680]	160 U	160 U	2.0	6	7	0.3 J	0.6 J	170 U
Methylene Chloride	[156.6]	<b>270 B</b>	<b>98 JB</b>	<b>6.0</b>	<b>5 B</b>	5 U	2	3	330 U
Methyl ethyl ketone	[170]	780 U	780 U	2.0 U	2 U	20 U	5 U	5 U	840 U
Methyl isobutyl ketone	[1,750]	250 J	780 U	99	7	20 U	5 U	0.9 J	840 U
Tetrachloroethene	[5.0]	160 U	160 U	11	10	130	9	9	170 U
Toluene	[2,000]	280	190	90 DJ	57 DJ	53	2	8	65 J
1,1,1-Trichloroethane	[200]	92 J	160 U	<b>58 DJ</b>	<b>32 E</b>	52	16	14	170 U
1,1,2 Trichloroethane	[5.0]	160 U	160 U	<b>2.30</b>	<b>2.2</b>	5 U	2	2	170 U
Trichloroethene	[6.4]	160 U	160 U	<b>49 DJ</b>	21	70	15	16	170 U
Vinyl Chloride	[5.0]	280	<b>270</b>	<b>470 D</b>	<b>160 D</b>	<b>300</b>	<b>290 D</b>	<b>300 D</b>	<b>900</b>
Xylenes (total)	[10,000]	110 J	160 U	46	20	36	6	9	170 U
<b>Semi-Volatile Organics</b>									
Bis (2-ethylhexyl) phthalate	[7.1]	<b>29</b>	<b>9 J</b>	<b>31</b>	<b>12</b>	2.5 U	10 U	10 U	<b>100 DB</b>
Di-n-butyl phthalate	[3,500]	10 U	10 U	1.0 J	10 U	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	[600]	21	9 J	24	4 J	10 U	2 B	10 U	170 U
Diethylphthalate	[28,000]	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U
Isoporene	[8.5]	3 J	3 J	11 U	10 U	8.3 U	10 U	10 U	10 U
Naphthalene	[14,000]	4 J	1 J	6.0 J	10 U	10 U	10 U	10 U	10 U
Phenol	[1,400]	10	10 U	1.0 J	10 U	10 U	10 U	10 U	0.6 J
<b>Polychlorinated biphenyls</b>									
Aroclor-1016	[0.5]	1 U	0.51 U	0.49 U	0.56 U	0.6 U	1 U	1 U	1 U
Aroclor-1221	[1.0]	2 U	1.0 U	0.98 U	1.1 U	0.6 U	2 U	2 U	2 U
Aroclor-1232	[0.5]	1 U	0.51 U	0.49 U	0.56 U	0.6 U	1 U	1 U	1 U
Aroclor-1242	[0.5]	1 U	0.51 U	0.49 U	0.56 U	0.6 U	1 U	1 U	1 U
Aroclor-1248	[0.5]	1 U	0.51 U	0.49 U	0.56 U	0.6 U	1 U	1 U	1 U
Aroclor-1254	[0.5]	1 U	0.51 U	0.49 U	0.56 U	0.6 U	1 U	1 U	1 U
Aroclor-1260	[0.5]	1 U	<b>29 J</b>	0.49 U	0.56 U	0.6 U	1 U	1 U	1 U
<b>Inorganics</b>									
Antimony	[46.5]	1.7 U	2.0 B	2.2 B	1.5 U	100 U	2.5 U	3.5 B	1.5 U
Arsenic	[50]	9.7 B	10.6	<b>8.8 B</b>	<b>4.6 B</b>	20 U	7.4 B	11.3	6.5 B
Barium	[1,000]	189	478	263	230	280	192 B	204	197 B
Beryllium	[4]	1 U	0.68 B	0.29 B	0.1 U	NA	0.10 U	0.40 U	0.30 U
Cadmium	[10]	0.7 U	1.9 B	0.31 B	0.3 U	5 U	0.60 U	0.40 U	0.30 U
Chromium VI	[50]	10 U	10 U	10.0 U	35.8	10 U	11.4	10 U	10 U
Lead	[50]	0.7 U	1.0 U	1.5 U	1.1 U	50 U	1.7 U	1.8 U	1.6 U
Manganese	[7,000]	24.7	151	167	195	240	548	557	564
Nickel	[150]	40.3	54.3	53.1	44.6	50	48	50.6	55.6
Silver	[50]	0.4 U	0.4 U	0.90 U	0.5 U	10 U	0.50 U	0.50 U	0.50 U
Tin	[21,000]	4.7 U	2.0 U	3.6 U	2.8 U	NA	9.0 U	3.7 U	2.6 U
Vanadium	[245]	0.56 B	0.4 U	0.80 U	0.4 U	50 U	0.70 U	2.1 B	1.7 U
Zinc	[7,000]	1.5 U	30	3.1 U	3.6 U	10 U	3.7 B	3.0 B	4.6 U
Cyanide	[154]	26.7	27	21.1	6.8 B	NA	2.9 B	1.6 B	4.0 B

**Notes:**

All concentrations are in ug/L.  
Concentrations in bold exceed the Revised Site Specific Acceptable Subsurface Water Concentrations as presented in the December 22, 2000 Background Report.

(2) = Revised Site-Specific Acceptable Subsurface Water Concentrations as determined in the Background Surface and Subsurface Water Monitoring Report dated December 22, 2000, Table 6 values.

U = Analyte not detected. The value shown is the associated detection limit.

B = Analyte was also detected in the laboratory method blank (organic) or analyte value is <contract required detection limit but >= instrument detection limit (inorganic).

NA = Sample was not analyzed due to laboratory error.

J = Estimated value.

D = Sample quantitated on a diluted sample

**TABLE B-4**  
**Summary of Analytical Results for Monitoring Well T-4A**  
**ECC Superfund Site**

LOCATION ENVIRON SAMPLE ID SAMPLING QUARTER	Acceptable Subsurface Water Concentration	T-4A ECTGW4A-01 4th 1998	T-4A ECTGW-03 2nd 1999	T-4A ECTGW4-05 4th 1999	T-4A ECTGW4-06 2nd 2000	T-4A ECTGW4-07 4th 2000	T-4A ECTGW4-08 1st 2001	T-4A ECTGW4-09 3rd 2001	T-4A ECTGW4-11 1st 2002
<b>Volatile Organics</b>									
Acetone	[3,500]	2 U	2 U	3.0 B	2 U/2 U	5 U	5 U	2 J	5 U
1,1-Dichloroethene	[7]	0.5 U	0.5 U	0.5 U	0.5 U/0.5 U	1 U	1 U	1 J	1 U
1,2-Dichloroethene (total)	[70]	0.5 U	0.5 U	0.5 U	0.5 U/0.5 U	1 U	1 U	0.1 J	1 U
Ethylbenzene	[650]	0.5 U	0.5 U	0.5 U	0.5 U/0.5 U	1 U	1 U	1 J	1 U
Methylene Chloride	[156.6]	1 B	1	0.5	1 B/0.7 B	0.8 J	0.6 J	2 U	2 U
Methyl ethyl ketone	[170]	2 U	2 U	0.7 J	2 U/2 U	5 U	5 U	5 U	5 U
Methyl isobutyl ketone	[1,750]	2 U	2 U	2.0 U	2 U/2 U	5 U	5 U	5 U	5 U
Tetrachloroethene	[5.0]	4	0.5 U	2.0	0.5 U/0.5 U	1 U	1 U	0.2 J	1 U
Toluene	[2,000]	0.6 B	0.5 U	0.4 J	0.3 J/0.2 J	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	[200]	0.5 U	0.5 U	1.0	0.5 U/0.5 U	1 U	1 U	1 U	1 U
1,1,2 Trichloroethane	[5.0]	0.5 U	0.5 U	0.5 U	0.5 U/0.5 U	1 U	1 U	1 U	1 U
Trichloroethene	[6.4]	5	0.6	2.0	0.5 U/0.5 U	1 U	1 U	0.2 J	1 U
Vinyl Chloride	[5.0]	0.5 U	0.5 U	0.5 U	0.5 U/0.5 U	1 U	1 U	1 U	1 U
Xylenes (total)	[10,000]	0.5 U	0.5 U	0.5 U	0.5 U/0.5 U	1 U	1 U	1 U	1 U
<b>Semi-Volatile Organics</b>									
Bis (2-ethylhexyl) phthalate	[7.1]	<del>10 U</del>	10 U	13	7 J/10	<del>10 U</del>	10 U	10 U	10 U
Di-n-butyl phthalate	[3,500]	10 U	10 U	10 U	10 U/10 U	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	[600]	10 U	10 U	10 U	10 U/10 U	1 U	1 U	1 U	1 U
Diethylphthalate	[28,000]	10 U	10 U	10 U	10 U/10 U	10 U	10 U	10 U	10 U
Isoprene	[8.5]	10 U	10 U	10 U	10 U/10 U	10 U	10 U	10 U	10 U
Naphthalene	[14,000]	10 U	10 U	10 U	10 U/10 U	10 U	10 U	10 U	10 U
Phenol	[1,400]	10 U	10 U	10 U	10 U/10 U	10 U	10 U	10 U	10 U
<b>Polychlorinated biphenyls</b>									
Aroclor-1016	[0.5]	1 U	0.53 U	0.54 U	0.53 U/0.53 U	1.0 U	1.0 U	1 U	1 U
Aroclor-1221	[1.0]	2 U	1.0 U	1.1 U	1.0 U/1.0 U	2.0 U	2.0 U	2 U	2 U
Aroclor-1232	[0.5]	1 U	0.53 U	0.54 U	0.53 U/0.53 U	1.0 U	1.0 U	1 U	1 U
Aroclor-1242	[0.5]	1 U	0.53 U	0.54 U	0.53 U/0.53 U	1.0 U	1.0 U	1 U	1 U
Aroclor-1248	[0.5]	1 U	0.53 U	0.54 U	0.53 U/0.53 U	1.0 U	1.0 U	1 U	1 U
Aroclor-1254	[0.5]	1 U	0.53 U	0.54 U	0.53 U/0.53 U	1.0 U	1.0 U	1 U	1 U
Aroclor-1260	[0.5]	1 U	0.53 U	0.54 U	0.53 U/0.53 U	1.0 U	1.0 U	1 U	1 U
<b>Inorganics</b>									
Antimony	[46.5]	1.7 U	1.0 U	1.8 U	1.5 U/1.5 U	7.6 P	2.5 U	1.7 B	1.5 U
Arsenic	[50]	1.5 U	1.4 U	7.6 U	2.1 U/5.2 B	3.4 U	4.2 U	1.2 U	1.7 U
Barium	[1,000]	197	255	67.1	47.9/93.1	40.4 B	40.6 B	358	41.5 B
Beryllium	[4]	0.2 U	0.34 B	0.39 B	0.1 U/0.1 U	0.2 U	0.10 U	0.40 U	0.36 U
Cadmium	[10]	1.1 B	1.7 B	0.30 U	0.3 U/0.3 U	0.3 U	0.60 U	0.40 U	0.30 U
Chromium VI	[50]	10 U	10 U	10.0 U	113/80.4	10 U	10 U	10 U	10 U
Lead	[50]	0.7 U	1.0 U	1.5 U	1.1 U/4.1	2.1 U	1.7 U	1.9 U	1.6 U
Manganese	[7,000]	63	191	289	85.2/293	330	49.1	18.5	221
Nickel	[150]	7.2 B	11.1	5.3	5.6/18	7.8 B	6.6 B	1.4 U	7.2 B
Silver	[50]	0.4 U	0.4 U	0.90 U	0.5 U/0.5 U	0.4 U	0.50 U	0.50 U	0.50 U
Tin	[21,000]	4.7 U	2.0 U	3.6 U	2.8 U/2.8 U	6.1 U	9.0 U	3.7 U	2.6 U
Vanadium	[245]	0.4 U	0.4 U	0.80 U	0.4 U/11.8 B	0.7 U	0.70 U	0.60 U	1.7 U
Zinc	[7,000]	1.5 U	30.8	3.1 U	3.6 U/40.4	1.2 U	1.1 U	1.7 B	4.6 U
Cyanide	[154]	10 U	4.7 U	8.2 U	0.9 U/0.9 U	1.1 B	0.69 B	0.80 U	0.95 B

**Notes:**

All concentrations are in ug/L.  
 Concentrations in bold exceed the Revised Site Specific Acceptable Subsurface Water Concentrations as presented in the December 22, 2000 Background Report.

[2] = Revised Site-Specific Acceptable Subsurface Concentrations as determined in the Background Surface and Subsurface Water Monitoring Report dated December 22, 2000, Table 6 values.

U = Analyte not detected. The value shown is the associated detection limit.

B = Analyte was also detected in the laboratory method blank (organic) or analyte value is <contract required detection limit but >= instrument detection limit (inorganic).

J = Estimated value.

1 U/0.8 U = Sample result/duplicate sample result.

**TABLE B-5**  
**Summary of Analytical Results for Monitoring Well T-5**  
**ECC Superfund Site**  
**(Page 1 of 2)**

LOCATION ENVIRON SAMPLE ID SAMPLING QUARTER	Acceptable Stream Concentration	T-5 ECTGW5-01 4th 1998	T-5 ECTGW5-02 1st 1999	T-5 ECTGW5-03 2nd 1999	T-5 ECTGW5-04 3rd 1999	T-5 ECTGW5-05 4th 1999	T-5 ECTGW5-06 2nd 2000	T-5 ECTGW5-07 4th 2000
<b>Volatile Organics</b>								
1,1-Dichloroethene	[1.85]	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
1,2-Dichloroethene(total)	[9.4]	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	1 U
Ethylbenzene	[3,280]	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Methylene Chloride	[15.7]	2 B	0.7 B	0.4 J	0.1 J	0.9	1.0 B	2 U
Tetrachloroethene	[8.85]	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Toluene	[3,400]	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	1 U
1,1,1-Trichloroethane	[5,280]	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
1,1,2-Trichloroethane	[41.8]	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Trichloroethene	[80.7]	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Vinyl chloride	[525]	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
<b>Semi-Volatile Organics</b>								
Bis (2-ethylhexyl) phthalate	[50,000]	4 J	12 U	12 U	9.0 U	7.0 J	1 J	1 J
Di-n-butyl phthalate	[154,000]	10 U	12 U	12 U	9.0 U	9.0 U	10 U	10 U
1,2-Dichlorobenzene	[763]	10 U	12 U	12 U	9.0 U	9.0 U	10 U	1 U
Diethylphthalate	[52,100]	10 U	12 U	12 U	9.0 U	9.0 U	10 U	10 U
Naphthalene	[620]	10 U	12 U	12 U	9.0 U	9.0 U	10 U	10 U
Phenol	[570]	10 U	12 U	2 J	9.0 U	9.0 U	10 U	10 U
<b>Polychlorinated biphenyls</b>								
Aroclor-1016	[0.5]	1 U	0.5 U	0.53 U	0.5 U	0.51 U	0.47 U	1.0 U
Aroclor-1221	[1.0]	2 U	1 U	1.0 U	1.0 U	1.0 U	0.94 U	2.0 U
Aroclor-1232	[0.5]	1 U	0.5 U	0.53 U	0.5 U	0.51 U	0.47 U	1.0 U
Aroclor-1242	[0.5]	1 U	0.5 U	0.53 U	0.5 U	0.51 U	0.47 U	1.0 U
Aroclor-1248	[0.5]	1 U	0.5 U	0.53 U	0.5 U	0.51 U	0.47 U	1.0 U
Aroclor-1254	[0.5]	1 U	0.5 U	0.53 U	0.5 U	0.51 U	0.47 U	1.0 U
Aroclor-1260	[0.5]	1 U	0.5 U	0.53 U	0.5 U	0.51 U	0.47 U	1.0 U
<b>Inorganics</b>								
Arsenic	[14]	1.4 U	1.4 U	1.4 B	1.4 B	7.6 U	2.1 U	3.9 B
Chromium VI	[86]	10 U	10 U	10 U	10.0 U	10 U	10 U	10 U
Lead	[26.8]	0.7 U	1.3 B	1.0 U	1.0 U	1.5 U	1.1 U	2.1 U
Nickel	[100]	1.4 B	0.8 U	3.3 B	3.2 B	2.6 B	3.2 U	3.0 B
Zinc	[152]	1.5 U	24.1	13.5 B	9.7 B	14.4	18 B	1.2 U
Cyanide	[23.9]	10 U	10 U	4.7 U	2.8 U	8.2 U	0.90 U	1.3 B

**Notes:**

All concentrations are in ug/L.

Concentrations in bold exceed the Revised Site Specific Acceptable Stream Water Concentrations as presented in the December 22, 2000 Background Report.

[2] = Revised Site-Specific Acceptable Stream Concentrations as determined in the Background Surface and Subsurface Water Monitoring Report dated December 22, 2000, Table 6 values.

U = Analyte not detected. The value shown is the associated detection limit.

B = Analyte was also detected in the laboratory method blank (organic) or analyte value is <contract required detection limit but >= instrument detection limit (inorganic).

J = Estimated value.

D = Sample quantitated on a diluted sample.

*should be Bold/analy*

**TABLE B-3**  
**Summary of Analytical Results for Monitoring Well T-5**  
**ECC Superfund Site**  
**(Page 2 of 2)**

LOCATION ENVIRON SAMPLE ID SAMPLING QUARTER	Acceptable Stream Concentration	T-5 ECTGW5-08 1st 2001	T-5 ECTGW5-09 3rd 2001	T-5 ECTGW5-11 1st 2002				
<b>Volatile Organics</b>								
1,1-Dichloroethene	[1.85]	1 U	1 U	1 U				
1,2-Dichloroethene(total)	[9.4]	1 U	1 U	1 U				
Ethylbenzene	[3,280]	1 U	1 U	1 U				
Methylene Chloride	[15.7]	0.5 J	1 U	2 U				
Tetrachloroethene	[8.85]	1 U	1 U	1 U				
Toluene	[3,400]	1 U	1 U	1 U				
1,1,1-Trichloroethane	[5,280]	1 U	1 U	1 U				
1,1,2-Trichloroethane	[41.8]	1 U	1 U	1 U				
Trichloroethene	[80.7]	1 U	1 U	1 U				
Vinyl chloride	[525]	1 U	1 U	1 U				
<b>Semi-Volatile Organics</b>								
Bis (2-ethylhexyl) phthalate	[50,000]	1 JB	12 U	1 J				
Di-n-butyl phthalate	[154,000]	10 U	12 U	10 U				
1,2-Dichlorobenzene	[763]	1 U	1 U	1 U				
Diethylphthalate	[52,100]	10 U	12 U	0.2 J				
Naphthalene	[620]	10 U	12 U	10 U				
Phenol	[570]	10 U	10 J	10 U				
<b>Polychlorinated biphenyls</b>								
Aroclor-1016	[0.5]	1 U	1 U	1 U				
Aroclor-1221	[1.0]	2 U	2 U	2 U				
Aroclor-1232	[0.5]	1 U	1 U	1 U				
Aroclor-1242	[0.5]	1 U	1 U	1 U				
Aroclor-1248	[0.5]	1 U	1 U	1 U				
Aroclor-1254	[0.5]	1 U	1 U	1 U				
Aroclor-1260	[0.5]	1 U	1 U	1 U				
<b>Inorganics</b>								
Arsenic	[14]	4.2 U	2.8 U					
Chromium VI	[86]	10 U	10 U	10 U				
Lead	[26.8]	1.7 U	1.6 U	1.6 U				
Nickel	[100]	1.3 U	3.3 U	1 U				
Zinc	[152]	1.1 U	24	4.6 U				
Cyanide	[23.9]	0.60 U	0.80 U	0.8 U				

**Notes:**

All concentrations are in ug/L.

Concentrations in bold exceed the Revised Site Specific Acceptable Stream Water Concentrations as presented in the December 22, 2000 Background Report.

[2] = Revised Site-Specific Acceptable Stream Concentrations as determined in the Background Surface and Subsurface Water Monitoring Report dated December 22, 2000, Table 6 values.

U = Analyte not detected. The value shown is the associated detection limit.

B = Analyte was also detected in the laboratory method blank (organic) or analyte value is <contract required detection limit but >= instrument detection limit (inorganic).

J = Estimated value.

D= Sample quantitated on a diluted sample.

**TABLE B-6**  
**Summary of Analytical Results for Monitoring Well T-6**  
**ECC Superfund Site**  
 (Page 1 of 2)

LOCATION ENVIRON SAMPLE ID SAMPLING QUARTER	Acceptable Stream Concentration	T-6 ECTGW6-01 4th 1998	T-6 ECTGW6-02 1st 1999	T-6 ECTGW6-03 2nd 1999	T-6 ECTGW6-04 3rd 1999	T-6 ECTGW6-05 4th 1999	T-6 ECTGW6-06 2nd 2000	T-6 ECTGW6-07 4th 2000
<b>Volatile Organics</b>								
1,1-Dichloroethene	[1.85]	500 U	1,200 U	620 U	4.0	37	1,200 U	1,000 U
1,2-Dichloroethene (total)	[9.4]	20,100	47,000	54,000 D	71,300 D	11,750 D	36,000	18,000
Ethylbenzene	[3,280]	500 U	1,200 U	620 U	10	140	230 J	240 J
Methylene Chloride	[15.7]	970 B	1,500 B	570 JB	7.0	97	920 JB	2,000 U
Tetrachloroethene	[8.85]	500 U	1,200 U	620 U	0.3 J	4.0 J	1,200 U	1,000 U
Toluene	[3,400]	1,100	2,300	4,300	72 E	620 D	3,800	2,900
1,1,1-Trichloroethane	[5,280]	940	920 J	4,100	2,500 D	25 U	1,800	1,000 U
1,1,2-Trichloroethane	[41.8]	500 U	1,200 U	620 U	0.5 U	25 U	1,200 U	1,000 U
Trichloroethene	[80.7]	500 U	1,200 U	620 U	0.6	8.0 J	1,200 U	1,000 U
Vinyl chloride	[525]	430 J	1,100 J	2,500	110 E	1,200 D	1,500	10,000
<b>Semi-Volatile Organics</b>								
Bis (2-ethylhexyl) phthalate	[50,000]	1 J	19 U	1 J	50 U	4.0 J	0.8 J	1 J
Di-n-butyl phthalate	[154,000]	11 U	19 U	10 U	50 U	9.0 U	10 U	10 U
1,2-Dichlorobenzene	[763]	26 U	27 D	52 D	34 J	29	68	250 J
Diethylphthalate	[52,100]	3 J	19 U	1 J	50 U	2.0 J	4 J	6 J
Naphthalene	[620]	14	7 DJ	10 J	11 J	9.0 J	24	21
Phenol	[370]	870 D	200 D	230 D	520	390 D	120 D	390 D
<b>Polychlorinated biphenyls</b>								
Aroclor-1016	[0.5]	1 U	0.5 U	0.54 U	0.5 U	0.5 U	0.49 U	1.0 U
Aroclor-1221	[1.0]	2 U	1 U	1.1 U	1.0 U	1.0 U	0.98 U	2.0 U
Aroclor-1232	[0.5]	1 U	0.5 U	0.54 U	0.5 U	0.5 U	0.49 U	1.0 U
Aroclor-1242	[0.5]	1 U	0.5 U	0.54 U	0.5 U	0.5 U	0.49 U	1.0 U
Aroclor-1248	[0.5]	1 U	0.5 U	0.54 U	0.5 U	0.5 U	0.49 U	1.2 P
Aroclor-1254	[0.5]	1 U	0.5 U	0.54 U	0.5 U	0.5 U	0.49 U	1.0 U
Aroclor-1260	[0.5]	1 U	0.5 U	0.54 U	0.5 U	0.5 U	0.49 U	1.0 U
<b>Inorganics</b>								
Arsenic	[14]	25.9 B	29.1	36.8	42.3	43.2	60.8	48.8
Chromium VI	[86]	10 U	10 U	10 U	10.0 U	10.0 U	10.0 U	10 U
Lead	[26.8]	0.7 U	0.7 U	1.0 U	1.0 U	1.5 U	1.1 U	2.1 U
Nickel	[100]	43	31	31.2	44.5	39.9	40.3	43.8
Zinc	[152]	1.5 U	200	19.0 B	12.8 B	27.3	3.6 U	1.2 U
Cyanide	[23.9]	10 U	10 U	4.7 U	3.4 B	8.2 U	0.9 U	1.9 B

**Notes:**

All concentrations are in ug/L.

Concentrations in bold exceed the Revised Site Specific Acceptable Stream Water Concentrations as presented in the December 22, 2000 Background Report.

[2] = Revised Site-Specific Acceptable Stream Concentrations as determined in the Background Surface and Subsurface Water Monitoring Report dated December 22, 2000, Table 6 values.

U = Analyte not detected. The value shown is the associated detection limit.

B = Analyte was also detected in the laboratory method blank (organic) or analyte value is <contract required detection limit but >= instrument detection limit (inorganic).

J = Estimated value.

P = Indicates a 25% or greater difference for detected concentrations between the two GC columns. The lower of the two values is reported.

D = Sample quantitated on a diluted sample.

0.000079

0.012  
11  
10  
47  
5.2



**TABLE B-6**  
**Summary of Analytical Results for Monitoring Well T-6**  
**ECC Superfund Site**  
**(Page 2 of 2)**

LOCATION ENVIRON SAMPLE ID SAMPLING QUARTER	Acceptable Stream Concentration	T-6 ECTGW6-08 1st 2001	T-6 ECTGW6-09 3rd 2001	T-6 ECTGW6-10 4th 2001	T-6 ECTGW6-11 1st 2002	T-6 ECTGW6-12 2nd 2002		
<b>Volatile Organics</b>								
1,1-Dichloroethene	[1.85]	250 U	1,000 U	1,300 U	1,300 U	21		
1,2-Dichloroethene(total)	[9.4]	<b>33,000 D</b>	<b>6,900</b>	<b>13,000</b>	<b>11,000</b>	<b>14,000 D</b>		
Ethylbenzene	[3,280]	350	1,000 U	1,300 U	220 J	210 DJ		
Methylene Chloride	[15.7]	<b>200 J</b>	2,000 U	2,500 U	2,500 U	2500 U		
Tetrachloroethene	[8.85]	250 U	1,000 U	1,300 U	1,300 U	6		
Toluene	[3,400]	<b>3,900</b>	2,200	3,100	3,200	3,200 D		
1,1,1-Trichloroethane	[5,280]	560	1,000 U	300 J	310 J	480 DJ		
1,1,2-Trichloroethane	[41.8]	250 U	1,000 U	1,300 U	1,300 U	8		
Trichloroethene	[80.7]	250 U	1,000 U	1,300 U	1,300 U	8		
Vinyl chloride	[525]	<b>9,900 D</b>	<b>14,000</b>	<b>13,000</b>	<b>11,000</b>	<b>17,000 D</b>		
<b>Semi-Volatile Organics</b>								
Bis (2-ethylhexyl) phthalate	[50,000]	10 U	2 J	6 JB	10 U	1 J		
Di-n-butyl phthalate	[154,000]	10 U	11 U	10 U	10 U	0.3 J		
1,2-Dichlorobenzene	[763]	140 JB	1,000 U	1,300 U	1,300 U	1300 U		
Diethylphthalate	[52,100]	3 J	2 J	3 J	2 J	3 J		
Naphthalene	[620]	17	19	20	16	19		
Phenol	[570]	260 D	53	28	45	19		
<b>Polychlorinated biphenyls</b>								
Aroclor-1016	[0.5]	1 U	1 U	1 U	1 U	1 U (0.50 U)		
Aroclor-1221	[1.0]	2 U	2 U	2 U	2 U	2 U (1 U)		
Aroclor-1232	[0.5]	1 U	<b>3.2</b>	1 U	1 U	1 U (0.50 U)		
Aroclor-1242	[0.5]	1 U	1 U	1 U	1 U	1 U (0.50 U)		
Aroclor-1248	[0.5]	1 U	1 U	1 U	1 U	1 U (0.50 U)		
Aroclor-1254	[0.5]	1 U	1 U	1 U	1 U	1 U (0.50 U)		
Aroclor-1260	[0.5]	1 U	1 U	1 U	1 U	<b>4.7 (0.50 U)</b>		
<b>Inorganics</b>								
Arsenic	[14]	<b>55.2</b>	<b>139</b>	<b>40.2</b>	<b>40.1</b>	<b>73.6</b>		
Chromium VI	[86]	<del>55.2</del>	10 U	10 U	10 U	10 U		
Lead	[26.8]	1.7 U	1.8 U	2.2 U	1.6 U	1.2 B		
Nickel	[100]	26.2 B	35.7 B	21.2 B	20.2 B	15.3 B		
Zinc	[152]	1.1 U	<b>2.5 B</b>	1.1 U	4.6 U	<b>5.4 B</b>		
Cyanide	[23.9]	1.1 B	<b>0.84 B</b>	2.2 B	1.2 B	1.4 B		

**Notes:**

All concentrations are in ug/L.

Concentrations in bold exceed the Revised Site Specific Acceptable Stream Water Concentrations as presented in the December 22, 2000 Background Report.

[2] = Revised Site-Specific Acceptable Stream Concentrations as determined in the Background Surface and Subsurface Water Monitoring Report dated December 22, 2000, Table 6 values.

U = Analyte not detected. The value shown is the associated detection limit.

B = Analyte was also detected in the laboratory method blank (organic) or analyte value is <contract required detection limit but >= instrument detection limit (inorganic).

J = Estimated value.

D = Sample quantitated on a diluted sample.

(0.50 U) = PCBs resampled and confirmed non detect.

**TABLE B-7**  
**Summary of Analytical Results for Monitoring Well T-7**  
**ECC Superfund Site**  
**(Page 1 of 2)**

LOCATION ENVIRON SAMPLE ID SAMPLING QUARTER	Acceptable Stream Concentration	T-7 ECTGW7-01 4th 1998	T-7 ECTGW7-02 1st 1999	T-7 ECTGW-03 2nd 1999	T-7 ECTGW7-04 3rd 1999	T-7 ECTGW7-05 4th 1999	T-7 ECTGW7-06 2nd 2000	T-7 ECTGW7-07 4th 2000
<b>Volatile Organics</b>								
1,1-Dichloroethene	[1.85]	0.8 U	2 U	2 U	0.5 U	0.5 U	0.5 U	4 U
1,2-Dichloroethene(total)	[9.4]	<b>23</b>	<b>93</b>	<b>69</b>	<b>123 D</b>	<b>64 D</b>	<b>59</b>	<b>26</b>
Ethylbenzene	[3,280]	0.8 U	2 U	2 U	1.0	2.0	3	4 U
Methylene Chloride	[15.7]	<b>2 B</b>	<b>3 B</b>	<b>2 JB</b>	1.0	0.6	<b>3 B</b>	8 U
Tetrachloroethene	[8.85]	<b>0.4 J</b>	2 U	2 U	2.0	3.0	3	4 U
Toluene	[3,400]	4	13	2 U	18	18	24	4
1,1,1-Trichloroethane	[5,280]	0.8 U	2 U	2 U	0.5 U	0.5 U	0.5 U	4 U
1,1,2-Trichloroethane	[41.8]	0.8 U	2 U	2 U	0.5 U	0.5 U	0.5 U	4 U
Trichloroethene	[80.7]	4	13	8	17	12	14	3 J
Vinyl chloride	[325]	0.6 J	1 J	1 J	3.0	2.0	7	0.7 J
<b>Semi-Volatile Organics</b>								
Bis (2-ethylhexyl) phthalate	[50,000]	1 J	10 U	2 J	2.0 J	1.0 J	2 J	10 U
Di-n-butyl phthalate	[154,000]	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	[763]	<b>2 J</b>	10 U	10 U	10 U	10 U	<b>2 J</b>	4 U
Diethylphthalate	[52,100]	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	[620]	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenol	[570]	29 U	13	18	80	18	47	23
<b>Polychlorinated biphenyls</b>								
Aroclor-1016	[0.5]	1 U	0.5 U	0.54 U	0.5 U	0.45 U	0.53 U	1.0 U
Aroclor-1221	[1.0]	2 U	0.99 U	1.1 U	1.0 U	0.91 U	1.0 U	2.0 U
Aroclor-1232	[0.5]	1 U	0.5 U	0.54 U	0.5 U	0.45 U	0.53 U	1.0 U
Aroclor-1242	[0.5]	1 U	0.5 U	0.54 U	0.5 U	0.45 U	0.53 U	1.0 U
Aroclor-1248	[0.5]	1 U	0.5 U	0.54 U	0.5 U	0.45 U	0.53 U	1.0 U
Aroclor-1254	[0.5]	1 U	0.5 U	0.54 U	0.10 J	0.45 U	0.53 U	1.0 U
Aroclor-1260	[0.5]	1 U	0.5 U	0.54 U	0.5 U	0.45 U	0.53 U	1.0 U
<b>Inorganics</b>								
Arsenic	[14]	<del>0.05</del>	1.4 U	1.4 U	2.0 U	7.6 U	2.1 U	3.4 U
Chromium VI	[86]	10 U	10	10 U	10.0 U	10.0 U	10 U	10 U
Lead	[26.8]	<b>0.88 B</b>	<b>1.8 B</b>	1.0 U	1.0 U	1.5 U	1.1 U	2.1 U
Nickel	[100]	6.8	6.8	7.2	8.5	5.0	6.9	4.4 B
Zinc	[152]	1.5 U	46.6	0.40 U	1.1 U	3.1 U	10.6 B	1.2 U
Cyanide	[23.9]	10 U	10 U	4.7 U	2.8 U	8.2 U	0.9 U	1.1 B

**Notes:**

All concentrations are in ug/L.

Concentrations in bold exceed the Revised Site Specific Acceptable Stream Water Concentrations as presented in the December 22, 2000 Background Report.

[2] = Revised Site-Specific Acceptable Stream Concentrations as determined in the Background Surface and Subsurface Water Monitoring Report dated December 22, 2000, Table 6 values.

U = Analyte not detected. The value shown is the associated detection limit.

B = Analyte was also detected in the laboratory method blank (organic) or analyte value is <contract required detection limit but >= instrument detection limit (inorganic).

D= Sample quantitated on a diluted sample.

J = Estimated Value.

**TABLE B-7**  
**Summary of Analytical Results for Monitoring Well T-7**  
**ECC Superfund Site**  
**(Page 2 of 2)**

LOCATION ENVIRON SAMPLE ID SAMPLING QUARTER	Acceptable Stream Concentration	T-7 ECTGW7-08 1st 2001	T-7 ECTGW7-09 3rd 2001	T-7 ECTGW7-10 4th 2001	T-7 ECTGW7-11 1st 2002	T-7 ECTGW7-12 2nd 2002		
<b>Volatile Organics</b>								
1,1-Dichloroethene	[1.85]	1 U	1 U	1 U	3 U	1 U/1 U		
1,2-Dichloroethene(total)	[9.4]	<b>31</b>	<b>24</b>	<b>18 D</b>	<b>12</b>	<b>10.8</b>		
Ethylbenzene	[3.280]	0.6 J	0.2 J	1	3 U	0.3 J/1 U		
Methylene Chloride	[15.7]	1 J	0.6 J	0.9 J	5 U	2 U/0.2 J		
Tetrachloroethene	[8.85]	0.6 J	1	0.3 J	3 U	1 U/1 U		
Toluene	[3.400]	6	3	13	3	2/2		
1,1,1-Trichloroethane	[5.280]	1 U	1 U	1 U	3 U	1 U/1 U		
1,1,2-Trichloroethane	[41.8]	1 U	1 U	1 U	3 U	1 U/1 U		
Trichloroethene	[80.7]	4	3	4	3	2/2		
Vinyl chloride	[525]	1	1	2	0.7 J	1/1		
<b>Semi-Volatile Organics</b>								
Bis (2-ethylhexyl) phthalate	[50,000]	10 U	11 U	0.9 JB	10 U	1 J/5 J		
Di-n-butyl phthalate	[154,000]	10 U	11 U	10 U	10 U	10 U/10 U		
1,2-Dichlorobenzene	[763]	0.5 JB	0.2 J	4	3 U	1 U/1 U		
Diethylphthalate	[52,100]	10 U	11 U	10 U	10 U	10 U/10 U		
Naphthalene	[620]	10 U	11 U	10 U	10 U	10 U/10 U		
Phenol	[570]	18	6 J	13	2 J	6 J/5 J		
<b>Polychlorinated biphenyls</b>								
Aroclor-1016	[0.5]	1 U	1 U	1 U	1 U	1 U/1 U (ND)*		
Aroclor-1221	[1.0]	2 U	2 U	2 U	2 U	2 U/2 U (ND)*		
Aroclor-1232	[0.5]	1 U	1 U	1 U	1 U	1 U/1 U (ND)*		
Aroclor-1242	[0.5]	1 U	1 U	1 U	1 U	<b>4.6/4.7 (ND)*</b>		
Aroclor-1248	[0.5]	1 U	1 U	1 U	1 U	1 U/1 U (ND)*		
Aroclor-1254	[0.5]	1 U	1 U	1 U	1 U	1 U/1 U (ND)*		
Aroclor-1260	[0.5]	1 U	1 U	1 U	1 U	<b>4.2/4.3 (ND)*</b>		
<b>Inorganics</b>								
Arsenic	[14]	4.2 U	1.2 U	3 U	1.7 U	2 U/2 U		
Chromium VI	[86]	10 U	10 U	10 U	10 U	10 U/10 U		
Lead	[26.8]	1.7 U	1.8 U	2.2 U	1.6 U	1.1 U/1.1 U		
Nickel	[100]	4.7 B	3.3 B	2.9 B	1.0 U	2.5 B/1.7 B		
Zinc	[152]	1.1 U	0.70 U	1.1 U	4.6 U	1.7 B/1.8 B		
Cyanide	[23.9]	0.60 U	0.80 U	1.2 B	0.80 U	0.60 U/0.60 U		

**Notes:**

All concentrations are in ug/L.

Concentrations in bold exceed the Revised Site Specific Acceptable Stream Water Concentrations as presented in the December 22, 2000 Background Report.

[2] = Revised Site-Specific Acceptable Stream Concentrations as determined in the Background Surface and Subsurface Water Monitoring Report dated December 22, 2000, Table 6 values.

U = Analyte not detected. The value shown is the associated detection limit.

B = Analyte was also detected in the laboratory method blank (organic) or analyte value is <contract required detection limit but >= instrument detection limit (inorganic).

D = Sample quantitated on a diluted sample.

J = Estimated Value.

1 U/0.8 U = Sample result/duplicate sample result.

(0.50 U) = PCBs resampled and confirmed non detect.

0.000079

0.0175

11

10

47

5.2

**TABLE B-8**  
**Summary of Analytical Results for Monitoring Well T-8**  
**ECC Superfund Site**  
**(Page 1 of 2)**

LOCATION ENVIRON SAMPLE ID SAMPLING QUARTER	Acceptable Stream Concentration	T-8 ECTGW8-01 4th 1998	T-8 ECTGW8-02 1st 1999	T-8 ECTGW-03 2nd 1999	T-8 ECTGW8-04 3rd 1999	T-8 ECTGW8-05 4th 1999	T-8 ECTGW8-06 2nd 2000	T-8 ECTGW8-07 4th 2000
<b>Volatile Organics</b>								
1,1-Dichloroethene	[1.85]	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
1,2-Dichloroethene (total)	[9.4]	10 B	6	6	6	5	5	6
Ethylbenzene	[3,280]	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Methylene Chloride	[15.7]	2 B	0.7 B	0.5 JB	0.2 J	2.0	2 B	2 U
Tetrachloroethene	[8.85]	7	0.5 U	1	0.7	0.5 J	0.2 J	0.2 J
Toluene	[3,400]	0.9 B	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J	1 U
1,1,1-Trichloroethane	[5,280]	0.5 U	0.5 U	0.4 J	0.5 U	0.5 U	0.5 U	1 U
1,1,2-Trichloroethane	[41.8]	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Trichloroethene	[80.7]	10	0.5 J	2	1.0	0.9	0.7	0.9 J
Vinyl chloride	[525]	1	1	0.4 J	0.4 J	0.3 J	0.4 J	0.2 J
<b>Semi-Volatile Organics</b>								
Bis (2-ethylhexyl) phthalate	[50,000]	1 J	10 U	9 U	1.0 J	1.0 JB	1 J	10 U
Di-n-butyl phthalate	[154,000]	10 U	10 U	9 U	10 U	10 U	11 U	10 U
1,2-Dichlorobenzene	[763]	2 J	10 U	9 U	10 U	10 U	11 U	1 U
Diethylphthalate	[52,100]	10 U	10 U	9 U	10 U	10 U	11 U	10 U
Naphthalene	[620]	10 U	10 U	9 U	10 U	10 U	11 U	10 U
Phenol	[570]	16	10 U	9 U	3.0 J	10 U	11 U	10 U
<b>Polychlorinated biphenyls</b>								
Aroclor-1016	[0.5]	1 U	0.5 U	0.54 U	0.45 U	0.49 U	0.51 U	1.0 U
Aroclor-1221	[1.0]	2 U	1 U	1.0 U	0.91 U	0.98 U	1.0 U	2.0 U
Aroclor-1232	[0.5]	1 U	0.5 U	0.54 U	0.45 U	0.49 U	0.51 U	1.0 U
Aroclor-1242	[0.5]	1 U	0.5 U	0.54 U	0.45 U	0.49 U	0.51 U	1.0 U
Aroclor-1248	[0.5]	1 U	0.5 U	0.54 U	0.45 U	0.49 U	0.51 U	1.0 U
Aroclor-1254	[0.5]	1 U	0.5 U	0.54 U	0.45 U	0.49 U	0.51 U	1.0 U
Aroclor-1260	[0.5]	1 U	0.5 U	0.54 U	0.45 U	0.49 U	0.51 U	1.0 U
<b>Inorganics</b>								
Arsenic	[14]	1.7 U	1.4 U	2.0 U	2.0 U	7.6 U	2.1 U	3.4 U
Chromium VI	[86]	10 U	10 U	10 U	10.0 U	10.0 U	10 U	10 U
Lead	[26.8]	1.1 B	2.0 B	1.0 U	1.0 U	1.5 U	1.1 U	2.1 U
Nickel	[100]	3.7 B	1.8 B	2.5 B	2.1 B	2.3 B	3.2 U	3.5 B
Zinc	[152]	1.5 U	107	9.8 B	29.1	7.4 B	10.7 B	1.2 U
Cyanide	[23.9]	10 U	10 U	4.7 U	2.8 U	8.2 U	0.90 U	1.0 B

**Notes:**

All concentrations are in ug/l.

Concentrations in bold exceed the Revised Site Specific Acceptable Stream Water Concentrations as presented in the December 22, 2000 Background Report.

[2] = Revised Site-Specific Acceptable Stream Concentrations as determined in the Background Surface and Subsurface Water Monitoring Report dated December 22, 2000, Table 6 values.

U = Analyte not detected. The value shown is the associated detection limit.

B = Analyte was also detected in the laboratory method blank (organic) or analyte value is <contract required detection limit but >= instrument detection limit (inorganic).

J = Estimated Value.

1 U/0.8 U = Duplicate sample result.

**TABLE B-8**  
**Summary of Analytical Results for Monitoring Well T-8**  
**ECC Superfund Site**  
**(Page 2 of 2)**

LOCATION ENVIRON SAMPLE ID SAMPLING QUARTER	Acceptable Stream Concentration	T-8 ECTGW8-08 1st 2001	T-8 ECTGW8-09 3rd 2001	T-8 ECTGW8-10 4th 2001	T-8 ECTGW8-11 1st 2002	T-8 ECTGW8-12 2nd 2002		
<b>Volatile Organics</b>								
1,1-Dichloroethene	[1.85]	1 U	1 U	1 U	1 U	1 U	NO	
1,2-Dichloroethene (total)	[9.4]	1 U	1 U	1 U	1 U	1 U		
Ethylbenzene	[3,280]	1 U	1 U	1 U	1 U	1 U		
Methylene Chloride	[15.7]	2 U	2 U	2 U	2 U	0.2 J		
Tetrachloroethene	[8.85]	1 U	0.1 J	1 U	1 U	1 U		
Toluene	[3,400]	1 U	1 U	0.2 J	1 U	1 U		
1,1,1-Trichloroethane	[5,280]	1 U	1 U	1 U	1 U	1 U		
1,1,2-Trichloroethane	[41.8]	1 U	1 U	1 U	1 U	1 U		
Trichloroethene	[80.7]	0.3 J	0.5 J	0.5 J	0.6 J	0.4 J		
Vinyl chloride	[525]	1 U	0.5 J	0.4 J	0.3 J	0.3 J		
<b>Semi-Volatile Organics</b>								
Bis (2-ethylhexyl) phthalate	[50,000]	10 U	1 J	0.6 JB	1 JB	1 J		
Di-n-butyl phthalate	[154,000]	10 U	10 U	10 U	10 U	10 U		
1,2-Dichlorobenzene	[763]	1 U	1 U	1 U	1 U	1 U		
Diethylphthalate	[52,100]	10 U	10 U	0.2 J	10 U	10 U		
Naphthalene	[620]	10 U	10 U	10 U	10 U	10 U		
Phenol	[570]	10 U	10 U	10 U	10 U	10 U		
<b>Polychlorinated biphenyls</b>								
Aroclor-1016	[0.5]	1 U	1 U	1 U	1 U	1 U		
Aroclor-1221	[1.0]	2 U	2 U	2 U	2 U	2 U		
Aroclor-1232	[0.5]	1 U	1 U	1 U	1 U	1 U		
Aroclor-1242	[0.5]	1 U	1 U	1 U	1 U	1 U		
Aroclor-1248	[0.5]	1 U	1 U	1 U	1 U	1 U		
Aroclor-1254	[0.5]	1 U	1 U	1 U	1 U	1 U		
Aroclor-1260	[0.5]	1 U	1 U	1 U	1 U	1 U		
<b>Inorganics</b>								
Arsenic	[14]	4.2 U	1.2 U	3 U	1.7 U	2 U		
Chromium VI	[86]	10 U	10 U	10 U	10 U	10 U		
Lead	[26.8]	1 U	1.8 U	2.2 U	1.6 U	1.1 U		
Nickel	[100]	2.3 B	2.4 B	1.5 U	1.5 B	1.2 B		
Zinc	[152]	1.1 U	0.70 U	1.1 U	4.6 U	2.2 B		
Cyanide	[23.9]	0.85 B	2.7 B	1.6 B	0.86 B	0.60 U		

**Notes:**

All concentrations are in ug/L.  
 Concentrations in bold exceed the Revised Site Specific Acceptable Stream Water Concentrations as presented in the December 22, 2000 Background Report.

[2] = Revised Site-Specific Acceptable Stream Concentrations as determined in the Background Surface and Subsurface Water Monitoring Report dated December 22, 2000, Table 6 values.

U = Analyte not detected. The value shown is the associated detection limit.

B = Analyte was also detected in the laboratory method blank (organic) or analyte value is <contract required detection limit but >= instrument detection limit (inorganic).

J = Estimated Value.

1 U/0.8 U = Duplicate sample result.

**TABLE B-9**  
**Summary of Analytical Results for Monitoring Well T-9**  
**ECC Superfund Site**  
**(Page 1 of 2)**

LOCATION ENVIRON SAMPLE ID SAMPLING QUARTER	Acceptable Stream Concentration	T-9 ECTGW9-01 4th 1998	T-9 ECTGW9-02 1st 1999	T-9 ECTGW9-03 2nd 1999	T-9 ECTGW9-04 3rd 1999	T-9 ECTGW9-05 4th 1999	T-9 ECTGW9-06 2nd 2000	T-9 ECTGW9-07 4th 2000
<b>Volatile Organics</b>								
1,1-Dichloroethene	[1.85]	0.5 U	1 U/0.8 U	0.5 U/0.5 U	0.5 U	0.5 U	0.5 U	8 U/1 U
1,2-Dichloroethene(total)	[9.4]	1	1 U/0.8 U	0.6/0.6	4.0	0.8	12	50/50 D
Ethylbenzene	[3,280]	0.5 U	1 U/0.8 U	0.5 U/0.5 U	0.5 U	0.5 U	0.5 U	8 U/1 U
Methylene Chloride	[15.7]	2 B	2 B/0.8 U	0.6 B/0.9 B	0.5 JB	0.5 U	0.9 B	17 U/2 J
Tetrachloroethene	[8.85]	0.5 U	1 U/0.8 U	0.5 U/0.5 U	0.5 U	0.5 U	0.5 U	8 U/1 U
Toluene	[3,400]	0.5 U	1 U/0.8 U	0.3 J/0.2 J	0.5 U	0.5 U	0.2 J	8 U/0.2 J
1,1,1-Trichloroethane	[5,280]	0.5 U	1 U/0.8 U	0.5 U/0.5 U	0.5 U	0.5 U	0.5 U	8 U/1 U
1,1,2-Trichloroethane	[41.8]	0.5 U	1 U/0.8 U	0.5 U/0.5 U	0.5 U	0.5 U	0.5 U	2 J/0.2 J
Trichloroethene	[80.7]	0.5 U	1 U/0.8 U	0.5 U/0.5 U	0.5 U	0.5 U	0.5 U	8 U/1 U
Vinyl chloride	[325]	0.5 U	56/38	35 D/43 D	0.5 U	34 D	210 D	110/90 D
<b>Semi-Volatile Organics</b>								
Bis (2-ethylhexyl) phthalate	[50,000]	4 J	12/1 J	4 J/1 J	6.0 J	10 U	3 J	10 U/10 U
Di-n-butyl phthalate	[154,000]	10 U	10 U/9 U	10 U/10 U	10 U	10 U	9 U	10 U/10 U
1,2-Dichlorobenzene	[763]	10 U	10 U/9 U	10 U/10 U	10 U	10 U	9 U	8 U/1 U
Diethylphthalate	[52,100]	10 U	10 U/9 U	10 U/10 U	10 U	10 U	9 U	10 U/10 U
Naphthalene	[620]	10 U	10 U/9 U	10 U/10 U	10 U	10 U	9 U	10 U/10 U
Phenol	[570]	10 U	10 U/9 U	10 U/10 U	10 U	10 U	9 U	10 U/10 U
<b>Polychlorinated biphenyls</b>								
Aroclor-1016	[0.5]	1 U	0.48 U/0.48 U	0.56 U/0.54 U	0.5 U	0.47 U	ND	1.0 U/1.0 U
Aroclor-1221	[1.0]	2 U	0.48 U/0.48 U	1.1 U/1.0 U	1.0 U	0.94 U	ND	2.0 U/2.0 U
Aroclor-1232	[0.5]	1 U	0.48 U/0.48 U	0.56 U/0.54 U	0.5 U	0.47 U	ND	1.0 U/1.0 U
Aroclor-1242	[0.5]	1 U	0.48 U/0.48 U	0.56 U/0.54 U	0.5 U	0.47 U	ND	1.0 U/1.0 U
Aroclor-1248	[0.5]	1 U	0.48 U/0.48 U	0.56 U/0.54 U	0.5 U	0.47 U	ND	1.0 U/1.0 U
Aroclor-1254	[0.5]	1 U	0.48 U/0.48 U	0.56 U/0.54 U	0.5 U	0.47 U	ND	1.0 U/1.0 U
Aroclor-1260	[0.5]	1 U	0.48 U/0.48 U	0.56 U/0.54 U	0.5 U	0.47 U	ND	1.0 U/1.0 U
<b>Inorganics</b>								
Arsenic	[14]	1.7 U	1.4 U/1.4 U	1.4 U/1.5 B	2.0 U	2.5 B	2.2 B	3.4 U/3.4 U
Chromium VI	[86]	10 U	10 U/10 U	10 U/10 U	10.0 U	10.0 U	99.9	10 U/10 U
Lead	[26.8]	0.7 U	1.4 B/2.0 B	1.0 U/1.0 U	1.0 U	1.5 U	1.1 U	2.1 U/2.1 U
Nickel	[100]	14.8 B	15/13.8	16.6/17.5	15.6	16.7	17.5	16.0 B/15.9 B
Zinc	[152]	11.9 U	160/49.4	18.0 B/191	4.2 B	3.1 U	7.3 B	1.2 U/1.2 U
Cyanide	[23.9]	10 U	10 U/10 U	4.7 U/4.7 U	2.8 U	8.2 U	0.9 U	0.99 B/0.98 B

**Notes:**

All concentrations are in ug/L.  
Concentrations in bold exceed the Revised Site Specific Acceptable Stream Water Concentrations as presented in the December 22, 2000 Background Report.

[2] = Revised Site-Specific Acceptable Stream Concentrations as determined in the Background Surface and Subsurface Water Monitoring Report dated December 22, 2000, Table 6 values.

U = Analyte not detected. The value shown is the associated detection limit.

B = Analyte was also detected in the laboratory method blank (organic) or analyte value is <contract required detection limit but >= instrument detection limit (inorganic).

D= Sample quantitated on a diluted sample.

J = Estimated Value.

1 U/0.8 U = Sample result/duplicate sample result.

**TABLE B-9**  
**Summary of Analytical Results for Monitoring Well T-9**  
**ECC Superfund Site**  
**(Page 2 of 2)**

LOCATION ENVIRON SAMPLE ID SAMPLING QUARTER	Acceptable Stream Concentration	T-9 ECTGW9-08 1st 2001	T-9 ECTGW9-09 3rd 2001	T-9 ECTGW9-11 1st 2002				
<b>Volatile Organics</b>								
1,1-Dichloroethene	[1.85]	10 U/10 U	1 U/1 U	1 U/1 U				
1,2-Dichloroethene(total)	[9.4]	<b>69/68</b>	<b>110 D/81 D</b>	<b>61 D/67 D</b>				
Ethylbenzene	[3.280]	10 U/10 U	1 U/1 U	0.2 J/0.2 J				
Methylene Chloride	[15.7]	20 U/20 U	1 J/1 J	1 J/0.9 J				
Tetrachloroethene	[8.85]	10 U/10 U	0.9 J/0.7 J	21 U/20				
Toluene	[3.400]	10 U/10 U	0.4 J/0.5 J	2 B/1 B				
1,1,1-Trichloroethane	[5.280]	10 U/10 U	1 U/1 U	0.5 J/0.3 J				
1,1,2-Trichloroethane	[41.8]	10 U/10 U	1 U/1 U	1 U/1 U				
Trichloroethene	[80.7]	10 U/10 U	0.5 J/0.4 J	12/7				
Vinyl chloride	[525]	170/160	370 D/110 D	190 D/270 D				
<b>Semi-Volatile Organics</b>								
Bis (2-ethylhexyl) phthalate	[50,000]	10 U/10 U	10 U/2 J	10 U/10 U				
Di-n-butyl phthalate	[154,000]	10 U/10 U	10 U/10 U	10 U/10 U				
1,2-Dichlorobenzene	[763]	10 U/10 U	1U/1U	0.3 J/1 U				
Diethylphthalate	[52,100]	10 U/10 U	10 U/10 U	10 U/10 U				
Naphthalene	[620]	10 U/10 U	10 U/10 U	10 U/10 U				
Phenol	[570]	10 U/10 U	10 U/10 U	10 U/10 U				
<b>Polychlorinated biphenyls</b>								
Aroclor-1016	[0.5]	1.0 U/1.0 U	1.0 U/1.0 U	1 U/1 U				
Aroclor-1221	[1.0]	2.0 U/2.0 U	2.0 U/2.0 U	2 U/2 U				
Aroclor-1232	[0.5]	1.0 U/1.0 U	1.0 U/1.0 U	1 U/1 U				
Aroclor-1242	[0.5]	1.0 U/1.0 U	1.0 U/1.0 U	1 U/1 U				
Aroclor-1248	[0.5]	1.0 U/1.0 U	1.0 U/1.0 U	1 U/1 U				
Aroclor-1254	[0.5]	1.0 U/1.0 U	1.0 U/1.0 U	1 U/1 U				
Aroclor-1260	[0.5]	1.0 U/1.0 U	1.0 U/1.0 U	1 U/1 U				
<b>Inorganics</b>								
Arsenic	[14]	4.2 U/4.2 U	<b>3.7 B/2.7 B</b>	<b>2.8 B/1.7 U</b>				
Chromium VI	[86]	10 U/10 U	10 U/10 U	10 U/10 U				
Lead	[26.8]	1.7 U/1.7 U	1.8 U/1.8 U	1.6 U/1.7 B				
Nickel	[100]	16.4 B/16.3 B	16.6 B/15.6 B	13.1 B/13.1 B				
Zinc	[152]	1.1 U/1.1 U	0.70 U/0.70 U	4.6 U/4.6 U				
Cyanide	[23.9]	0.70 B/0.60 U	0.80 U/0.80 U	0.80 U/0.80 U				

**Notes:**

All concentrations are in ug/L.

Concentrations in bold exceed the Revised Site Specific Acceptable Stream Water Concentrations as presented in the December 22, 2000 Background Report.

[2] = Revised Site-Specific Acceptable Stream Concentrations as determined in the Background Surface and Subsurface Water Monitoring Report dated December 22, 2000, Table 6 values.

U = Analyte not detected. The value shown is the associated detection limit.

B = Analyte was also detected in the laboratory method blank (organic) or analyte value is <contract required detection limit but >= instrument detection limit (inorganic).

D= Sample quantitated on a diluted sample.

J = Estimated Value.

1 U/0.8 U = Sample result/duplicate sample result.

**TABLE B-10**  
**Summary of Analytical Results for Monitoring Well 1-10**  
**ECC Superfund Site**  
**(Page 1 of 2)**

LOCATION ENVIRON SAMPLE ID SAMPLING QUARTER	Acceptable Stream Concentration	T-10 ECTGW10-01 4th 1998	T-10 ECTGW10-02 1st 1999	T-10 ECTGW10-03 2nd 1999	T-10 ECTGW10-04 3rd 1999	T-10 ECTGW10-05 4th 1999	T-10 ECTGW10-06 2nd 2000	T-10 ECTGW10-07 4th 2000
<b>Volatile Organics</b>								
1,1-Dichloroethene	[1.85]	25 U	6 U	0.4 J	0.5	0.4 J	62 U	1 U
1,2-Dichloroethene(total)	[9.4]	930	190	228 D	19.4 D	419 D	400	240 D
Ethylbenzene	[3,280]	25 U	6 U	0.5 U	0.5 U	0.5 U	12 U	1 U
Methylene Chloride	[15.7]	50 B	7 B	0.6 B	0.4 JB	0.3 J	12 JB	2 U
Tetrachloroethene	[8.85]	25 U	6 U	0.5 U	0.5 U	0.5 U	12 U	1 U
Toluene	[3,400]	25 U	6 U	0.5 U	0.5 U	0.5 U	3 J	0.2 J
1,1,1-Trichloroethane	[5,280]	130	15	19	18	19	16	8
1,1,2-Trichloroethane	[41.8]	25 U	6 U	0.5 U	0.5 U	0.5 U	12 U	1 U
Trichloroethene	[80.7]	25 U	6 U	2	2.0	2.0	3 J	1.0
Vinyl chloride	[525]	25 U	6 U	5	0.5 U	0.5 U	16	14
<b>Semi-Volatile Organics</b>								
Bis (2-ethylhexyl) phthalate	[50,000]	10 U	1 J	3 J	2.0 J	1.0 JB	1 J	1 J
Di-n-butyl phthalate	[154,000]	10 U	9 U	11 U	10 U	9.0 U	10 U	10 U
1,2-Dichlorobenzene	[763]	10 U	9 U	11 U	10 U	9.0 U	10 U	1 U
Diethylphthalate	[52,100]	10 U	9 U	11 U	10 U	9.0 U	10 U	10 U
Naphthalene	[620]	10 U	9 U	11 U	10 U	9.0 U	10 U	10 U
Phenol	[570]	10 U	9 U	11 U	10 U	9.0 U	10 U	10 U
<b>Polychlorinated biphenyls</b>								
Aroclor-1016	[0.5]	1 U	0.5 U	0.51 U	0.5 U	0.46 U	0.58 U	1.0 U
Aroclor-1221	[1.0]	2 U	1 U	1.0 U	1.0 U	0.92 U	1.2 U	2.0 U
Aroclor-1232	[0.5]	1 U	0.5 U	0.51 U	0.5 U	0.46 U	0.58 U	1.0 U
Aroclor-1242	[0.5]	1 U	0.5 U	0.51 U	0.5 U	0.46 U	0.58 U	1.0 U
Aroclor-1248	[0.5]	1 U	0.5 U	0.51 U	0.5 U	0.46 U	0.58 U	1.0 U
Aroclor-1254	[0.5]	1 U	0.5 U	0.51 U	0.5 U	0.46 U	0.58 U	1.0 U
Aroclor-1260	[0.5]	1 U	0.5 U	0.51 U	0.5 U	0.46 U	0.58 U	1.0 U
<b>Inorganics</b>								
Arsenic	[14]	10 U	10 U	1.4 U	10.0 U	7.6 U	2.1 U	3.4 U
Chromium VI	[86]	10 U	10 U	10 U	10.0 U	10.0 U	156	10 U
Lead	[26.8]	0.84 B	0.97 B	1.5 B	1.0 U	1.5 U	1.1 U	2.1 U
Nickel	[100]	20.7	13.9	14.2	12.4	12.7	11.6	14.2 B
Zinc	[152]	1.5 U	192	7.2 B	7.2 B	16.4 B	3.6 U	1.2 U
Cyanide	[23.9]	10 U	10 U	4.7 U	2.8 U	8.2 U	0.90 U	1.6 B

**Notes:**

All concentrations are in ug/L.

Concentrations in bold exceed the Revised Site Specific Acceptable Stream Water Concentrations as presented in the December 22, 2000 Background Report.

[2] = Revised Site-Specific Acceptable Stream Concentrations as determined in the Background Surface and Subsurface Water Monitoring Report dated December 22, 2000, Table 6 values.

U = Analyte not detected. The value shown is the associated detection limit.

B = Analyte was also detected in the laboratory method blank (organic) or analyte value is <contract required detection limit but >= instrument detection limit (inorganic).

J = Estimated Value.

D = Sample quantitated on a diluted sample.



**TABLE B-10**  
**Summary of Analytical Results for Monitoring Well T-10**  
**ECC Superfund Site**  
**(Page 2 of 2)**

LOCATION ENVIRON SAMPLE ID SAMPLING QUARTER	Acceptable Stream Concentration	T-10 ECTGW10-08 1st 2001	T-10 ECTGW10-09 3rd 2001	T-10 ECTGW10-11 1st 2002				
<b>Volatile Organics</b>								
1,1-Dichloroethene	[1.85]	13 U	0.3 J	0.8 J				
1,2-Dichloroethene(total)	[9.4]	<b>210</b>	<b>230 D</b>	<b>300 D</b>				
Ethylbenzene	[3.280]	13 U	1 U	1 U				
Methylene Chloride	[15.7]	25 U	2 U	2 U				
Tetrachloroethene	[8.85]	3 JB	0.2 J	<b>15</b>	should be average / Bold			
Toluene	[3.400]	13 U	1 U	0.8 JB				
1,1,1-Trichloroethane	[5.280]	7 J	10	11				
1,1,2-Trichloroethane	[41.8]	13 U	1 U	1 U				
Trichloroethene	[80.7]	2 JB	2	9				
Vinyl chloride	[525]	6 J	16 DJ	96 D				
<b>Semi-Volatile Organics</b>								
Bis (2-ethylhexyl) phthalate	[50,000]	10 U	7 J	10 U				
Di-n-butyl phthalate	[154,000]	10 U	10 U	10 U				
1,2-Dichlorobenzene	[763]	13 U	1 U	0.2 J				
Diethylphthalate	[52,100]	10 U	10 U	10 U				
Naphthalene	[620]	10 U	10 U	10 U				
Phenol	[570]	10 U	10 U	10 U				
<b>Polychlorinated biphenyls</b>								
Aroclor-1016	[0.5]	1 U	1 U	1 U				
Aroclor-1221	[1.0]	2 U	2 U	2 U				
Aroclor-1232	[0.5]	1 U	1 U	1 U				
Aroclor-1242	[0.5]	1 U	1 U	1 U				
Aroclor-1248	[0.5]	1 U	1 U	1 U				
Aroclor-1254	[0.5]	1 U	1 U	1 U				
Aroclor-1260	[0.5]	1 U	1 U	1 U				
<b>Inorganics</b>								
Arsenic	[14]	<b>14.3</b>	<b>14.3 B</b>	<b>14.3</b>				
Chromium VI	[86]	10 U	<b>10.8 B</b>	10 U				
Lead	[26.8]	1.7 U	2.2 B	1.6 U				
Nickel	[100]	14.9 B	12.2 B	10.8 B				
Zinc	[152]	1.1 U	0.70 U	4.6 U				
Cyanide	[23.9]	0.66 B	0.80 U	0.8 U				

**Notes:**

All concentrations are in ug/L.

Concentrations in bold exceed the Revised Site Specific Acceptable Stream Water Concentrations as presented in the December 22, 2000 Background Report.

[2] = Revised Site-Specific Acceptable Stream Concentrations as determined in the Background Surface and Subsurface Water Monitoring Report dated December 22, 2000, Table 6 values.

U = Analyte not detected. The value shown is the associated detection limit.

B = Analyte was also detected in the laboratory method blank (organic) or analyte value is <contract required detection limit but >= instrument detection limit (inorganic).

J = Estimated Value.

D = Sample quantitated on a diluted sample.

**TABLE B-11**  
**Summary of Analytical Results for Monitoring Well S-1**  
**ECC Superfund Site**  
**(Page 1 of 2)**

LOCATION ENVIRON SAMPLE ID SAMPLING QUARTER	Acceptable Stream Concentration	S-1 ECSGW1-01 4th 1998	S-1 ECSGW1-02 1st 1999	S-1 ECSGW-03 2nd 1999	S-1 ECSGW1-04 3rd 1999	S-1 ECSGW1-05 4th 1999	S-1 ECSGW1-06 2nd 2000	S-1 ECSGW1-07 4th 2000
<b>Volatile Organics</b>								
1,1-Dichloroethene	[1.85]	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U/1 U
1,2-Dichloroethene(total)	[9.4]	0.5 U	0.5 U	0.5 U	0.3 J	0.5 U	0.5 U	1 U/1 U
Ethylbenzene	[3,280]	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U/1 U
Methylene Chloride	[15.7]	2 B	0.7 B	0.7	0.5 JB	0.5 J	2 B	0.8 J/2 U
Tetrachloroethene	[8.85]	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U/1 U
Toluene	[3,400]	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J	0.7 J/1 U
1,1,1-Trichloroethane	[5,280]	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U/1 U
1,1,2-Trichloroethane	[41.8]	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U/1 U
Trichloroethene	[80.7]	0.5 U	0.5 U	0.8	0.5 U	0.5 U	0.5 U	1 U/1 U
Vinyl chloride	[525]	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U/1 U
<b>Semi-Volatile Organics</b>								
is (2-ethylhexyl) phthalate	[50,000]	10 U/10 U	10 U	10 U	10 U	10 U	11 U	10 U/ 10 U
Di-n-butyl phthalate	[154,000]	10 U/10 U	10 U	10 U	10 U	10 U	11 U	10 U/ 10 U
1,2-Dichlorobenzene	[763]	10 U/10 U	10 U	10 U	10 U	10 U	11 U	1 U/1 U
Diethylphthalate	[52,100]	10 U/10 U	10 U	10 U	10 U	10 U	11 U	10 U/ 10 U
Naphthalene	[620]	10 U/10 U	10 U	10 U	10 U	10 U	11 U	10 U/ 10 U
Phenol	[570]	10 U/10 U	10 U	10 U	10 U	10 U	11 U	10 U/ 10 U
<b>Polychlorinated biphenyls</b>								
Aroclor-1016	[0.5]	1 U/1 U	0.48 U	0.54 U	0.5 U	0.51 U	0.46 U	1.0 U/1.0 U
Aroclor-1221	[1.0]	2 U/2 U	0.95 U	1.1 U	1.0 U	1.0 U	0.93 U	2.0 U/2.0 U
Aroclor-1232	[0.5]	1 U/1 U	0.48 U	0.54 U	0.5 U	0.51 U	0.46 U	1.0 U/1.0 U
Aroclor-1242	[0.5]	1 U/1 U	0.48 U	0.54 U	0.5 U	0.51 U	0.46 U	1.0 U/1.0 U
Aroclor-1248	[0.5]	1 U/1 U	0.48 U	0.54 U	0.5 U	0.51 U	0.46 U	1.0 U/1.0 U
Aroclor-1254	[0.5]	1 U/1 U	0.48 U	0.54 U	0.5 U	0.51 U	0.46 U	1.0 U/1.0 U
Aroclor-1260	[0.5]	1 U/1 U	0.48 U	0.54 U	0.5 U	0.51 U	0.46 U	1.0 U/1.0 U
<b>Inorganics</b>								
Arsenic	[14.0]	1.7 U/1.7 U	1.4 U	1.4 U	2.0 U	7.6 U	2.1 U	3.4 U/3.4 U
Chromium VI	[86.0]	10 U/10 U	10 U	10 U	10.0 U	10.0 U	15.1	10 U/10 U
Lead	[26.8]	0.81 B/ 0.7 U	0.7 U	1.0 U	1.0 U	1.5 U	1.1 U	2.1 U/2.1 U
Nickel	[100]	0.7 U/0.7 U	1.3 B	1.3 B	1.0 U	1.1 U	3.2 U	0.96 B/0.96 B
Zinc	[152.0]	1.5 U/1.5 U	0.8 U	4.8 B	1.1 U	3.1 U	3.6 U	1.2 U/1.2 U
Cyanide	[23.9]	10 U/10 U	10 U	4.7 U	2.8 U	8.2 U	0.90 U	1.1 B/1.3 B

**Notes:**

All concentrations are in ug/L.

Concentrations in bold exceed the Revised Site Specific Acceptable Stream Water Concentrations as presented in the December 22, 2000 Background Report

[2] = Revised Site-Specific Acceptable Stream Concentrations as determined in the Background Surface and Subsurface Water Monitoring Report dated December 22, 2000, Table 6 values.

U = Analyte not detected. The value shown is the associated detection limit.

B = Analyte was also detected in the laboratory method blank (organic) or analyte value is <contract required detection limit but >= instrument detection limit (inorganic).

J = Estimated Value.

1 U/0.8 U = Sample result/duplicate sample result.

**TABLE B-11**  
**Summary of Analytical Results for Monitoring Well S-1**  
**ECC Superfund Site**  
**(Page 2 of 2)**

LOCATION ENVIRON SAMPLE ID SAMPLING QUARTER	Acceptable Stream Concentration	S-1 ECSGW1-08 1st 2001	S-1 ECSGW1-09 3rd 2001	S-1 ECSGW1-11 1st 2002				
<b>Volatile Organics</b>								
1,1-Dichloroethene	[1.85]	1 U/1 U	1 U/1 U	1 U				
1,2-Dichloroethene (total)	[9.4]	1 U/1 U	0.2 J/0.1 J	1 U				
Ethylbenzene	[3.280]	1 U/1 U	1 U/1 U	1 U				
Methylene Chloride	[15.7]	2 U/0.7 J	2 U/2 U	2 U				
Tetrachloroethene	[8.85]	1 U/1 U	1 U/1 U	1 U				
Toluene	[3.400]	1 U/1 U	1 U/1 U	1 U				
1,1,1-Trichloroethane	[5.280]	1 U/1 U	1 U/1 U	1 U				
1,1,2-Trichloroethane	[41.8]	1 U/1 U	1 U/1 U	1 U				
Trichloroethene	[80.7]	1 U/1 U	1 U/1 U	1 U				
Vinyl chloride	[525]	1 U/1 U	1 U/1 U	1 U				
<b>Semi-Volatile Organics</b>								
is (2-ethylhexyl) phthalate	[50,000]	10 U/ 1 JB	1 J/10 U	10 U				
Di-n-butyl phthalate	[154,000]	10 U/ 10 U	10 U/10 U	10 U				
1,2-Dichlorobenzene	[763]	1 U/1 U	1 U/1 U	1 U				
Diethylphthalate	[52,100]	10 U/ 10 U	10 U/10 U	10 U				
Naphthalene	[620]	10 U/ 10 U	10 U/10 U	10 U				
Phenol	[570]	10 U/ 10 U	10 U/10 U	10 U				
<b>Polychlorinated biphenyls</b>								
Aroclor-1016	[0.5]	1.0 U/1.0 U	1 U/1 U	1 U				
Aroclor-1221	[1.0]	2.0 U/2.0 U	2 U/2 U	2 U				
Aroclor-1232	[0.5]	1.0 U/1.0 U	1 U/1 U	1 U				
Aroclor-1242	[0.5]	1.0 U/1.0 U	1 U/1 U	1 U				
Aroclor-1248	[0.5]	1.0 U/1.0 U	1 U/1 U	1 U				
Aroclor-1254	[0.5]	1.0 U/1.0 U	1 U/1 U	1 U				
Aroclor-1260	[0.5]	1.0 U/1.0 U	1 U/1 U	1 U				
<b>Inorganics</b>								
Arsenic	[14.0]	4.2 U/4.2 U	1.0 B	1.7 U				
Chromium VI	[86.0]	10 U/10 U	10 U/10 U	10 U				
Lead	[26.8]	1.7 U/1.7 U	1.8 U/1.8 U	1.6 U				
Nickel	[100]	1.3 U/1.3 U	7.8 B/1.4 U	1 U				
Zinc	[152.0]	1.1 U/1.1 U	4.9 B/70 U	4.6 U				
Cyanide	[23.9]	0.60 U/0.60 U	0.80 U/80 U	0.8 U				

**Notes:**

All concentrations are in ug/L.

Concentrations in bold exceed the Revised Site Specific Acceptable Stream Water Concentrations as presented in the December 22, 2000 Background Report.

[2] = Revised Site-Specific Acceptable Stream Concentrations as determined in the Background Surface and Subsurface Water Monitoring Report dated December 22, 2000, Table 6 values.

U = Analyte not detected. The value shown is the associated detection limit.

B = Analyte was also detected in the laboratory method blank (organic) or analyte value is <contract required detection limit but >= instrument detection limit (inorganic).

J = Estimated Value.

1 U/0.8 U = Sample result/duplicate sample result.

**TABLE B-12**  
**Summary of Analytical Results for Monitoring Well S-2**  
**ECC Superfund Site**  
**(Page 1 of 2)**

LOCATION ENVIRON SAMPLE ID SAMPLING QUARTER	Acceptable Stream Concentration	S-2 ECSGW2-01 4th 1998	S-2 ECSGW2-02 1st 1999	S-2 ECSGW2-03 2nd 1999	S-2 ECSGW2-04 3rd 1999	S-2 ECSGW2-05 4th 1999	S-2 ECSGW2-06 2nd 2000	S-2 ECSGW2-07 4th 2000
<b>Volatile Organics</b>								
1,1-Dichloroethene	[1.85]	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U/0.5 U	0.5 U	1 U
1,2-Dichloroethene(total)	[9.4]	0.5 U	0.5 U	0.5 U	0.6	0.5 U/0.5 U	0.4 J	0.4 J
Ethylbenzene	[3.280]	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U/0.5 U	0.5 U	1 U
Methylene Chloride	[15.7]	2 B	0.8 B	0.3 J	0.5 U	2.0/1.0	2 B	2 U
Tetrachloroethene	[8.85]	0.5 U	0.5 U	0.5 U	0.5 U	0.9/0.7	0.5 U	1 U
Toluene	[3,400]	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J/0.2 J	0.4 J	0.2 J
1,1,1-Trichloroethane	[5,280]	0.5 U	0.5 U	0.5 U	0.5 U	0.5/0.4 J	0.5 U	1 U
1,1,2-Trichloroethane	[41.8]	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U/0.5 U	0.5 U	1 U
Trichloroethene	[80.7]	0.5 U	0.5 U	0.5 U	0.5 U	0.9/0.9	0.5 U	1 U
Vinyl chloride	[525]	3	0.4 J	0.5 U	0.6	0.8/0.7	0.9	0.2 J
<b>Semi-Volatile Organics</b>								
Bis (2-ethylhexyl) phthalate	[50,000]	10 U/10 U	10 U	10 U	1.0 J	10 U/10 U	10 U	11 U
Di-n-butyl phthalate	[154,000]	10 U/10 U	10 U	10 U	4.0 J	10 U/10 U	10 U	11 U
1,2-Dichlorobenzene	[763]	10 U/10 U	10 U	10 U	10 U	10 U/10 U	10 U	1 U
Diethylphthalate	[52,100]	10 U/10 U	10 U	10 U	10 U	10 U/10 U	10 U	11 U
Naphthalene	[620]	10 U/10 U	10 U	10 U	10 U	10 U/10 U	10 U	11 U
Phenol	[570]	10 U/10 U	10 U	10 U	10 U	10 U/10 U	10 U	11 U
<b>Polychlorinated biphenyls</b>								
Aroclor-1016	[0.5]	1 U/ 1U	0.5 U	0.50 U	0.56 U	0.51 U/0.51 U	0.46 U	1.0 U
Aroclor-1221	[1.0]	2 U/ 2U	1 U	1.0 U	1.1 U	1.0 U/1.0 U	0.93 U	2.0 U
Aroclor-1232	[0.5]	1 U/ 1U	0.5 U	0.50 U	0.56 U	0.51 U/0.51 U	0.46 U	1.0 U
Aroclor-1242	[0.5]	1 U/ 1U	0.5 U	0.50 U	0.56 U	0.51 U/0.51 U	0.46 U	1.0 U
Aroclor-1248	[0.5]	1 U/ 1U	0.5 U	0.50 U	0.56 U	0.51 U/0.51 U	0.46 U	1.0 U
Aroclor-1254	[0.5]	1 U/ 1U	0.5 U	0.50 U	0.56 U	0.51 U/0.51 U	0.46 U	1.0 U
Aroclor-1260	[0.5]	1 U/ 1U	0.5 U	0.50 U	0.56 U	0.51 U/0.51 U	0.46 U	1.0 U
<b>Inorganics</b>								
Arsenic	[14.0]	1.7 U/ 1.7 U	1.4 U	1.4 U	2.0 U	7.6 U/7.6 U	2.1 U	3.4 U
Chromium VI	[86.0]	10 U/10 U	10 U	10 U	10.0 U	10.0 U/10.0 U	10 U	10 U
Lead	[26.8]	0.7 U/0.7 U	0.7 U	1.0 U	1.0 U	1.5 U/1.5 U	1.1 U	2.1 U
Nickel	[100]	4 B/3.8 B	4.8 B	5	4.7 B	4.8 B/6.1 U	4.4 B	6.2 B
Zinc	[152.0]	1.5 U/1.5 U	0.8 U	12.4	1.1 U	3.1 U/3.1 U	3.6 U	1.2 U
Cyanide	[23.9]	10 U/10 U	10 U	4.7 U	2.8 U	8.2 U/8.2 U	0.90 U	0.95 B

**Notes:**

All concentrations are in ug/L.

Concentrations in bold exceed the Revised Site Specific Acceptable Stream Water Concentrations as presented in the December 22, 2000 Background Report.

[2] = Revised Site-Specific Acceptable Stream Concentrations as determined in the Background Surface and Subsurface Water Monitoring Report dated December 22, 2000, Table 6 values.

U = Analyte not detected. The value shown is the associated detection limit.

B = Analyte was also detected in the laboratory method blank (organic) or analyte value is <contract required detection limit but >= instrument detection limit (inorganic).

J = Estimated Value.

1 U/0.8 U = Sample result/Duplicate sample result.

**TABLE B-12**  
**Summary of Analytical Results for Monitoring Well S-2**  
**ECC Superfund Site**  
**(Page 2 of 2)**

LOCATION ENVIRON SAMPLE ID SAMPLING QUARTER	Acceptable Stream Concentration	S-2 ECSGW2-08 1st 2001	S-2 ECSGW2-09 3rd 2001	S-2 ECSGW2-10 4th 2001	S-2 ECSGW2-11 1st 2002	S-2 ECSGW2-12 2nd 2002		
<b>Volatile Organics</b>								
1,1-Dichloroethene	[1.85]	1 U	1 U	1 U	1 U/1 U	1 U		
1,2-Dichloroethene(total)	[9.4]	0.3 J	0.1 J	0.3 J	1 U/1 U	1 U		
Ethylbenzene	[3,280]	1 U	1 U	1 U	1 U/1 U	1 U		
Methylene Chloride	[15.7]	0.6 J	2 U	2 U	2 U/2 U	0.5 J		
Tetrachloroethene	[8.85]	1 U	1 U	1 U	1 U/1 U	1 U		
Toluene	[3,400]	1 U	1 U	0.1 J	1 U/0.1 J	1 U		
1,1,1-Trichloroethane	[5,280]	1 U	1 U	1 U	1 U/1 U	1 U		
1,1,2-Trichloroethane	[41.8]	1 U	1 U	1 U	1 U/1 U	1 U		
Trichloroethene	[80.7]	1 U	1 U	1 U	1 U/1 U	1 U		
Vinyl chloride	[525]	0.4 J	1	0.4 J	0.4 J/0.5 J	0.3 J		
<b>Semi-Volatile Organics</b>								
Bis (2-ethylhexyl) phthalate	[50,000]	10 U	10 U	0.8 JB	10 U/10 U	0.8 J		
Di-n-butyl phthalate	[154,000]	10 U	10 U	10 U	10 U/10 U	10 U		
1,2-Dichlorobenzene	[763]	1 U	1 U	1 U	1 U/1 U	1 U		
Diethylphthalate	[52,100]	10 U	10 U	10 U	10 U/10 U	10 U		
Naphthalene	[620]	10 U	10 U	10 U	10 U/10 U	10 U		
Phenol	[570]	10 U	10 U	10 U	10 U/10 U	10 U		
<b>Polychlorinated biphenyls</b>								
Aroclor-1016	[0.5]	1.0 U	1.0 U	1.0 U	1 U/1 U	1.0 U		
Aroclor-1221	[1.0]	2.0 U	2.0 U	2.0 U	2 U/2 U	2.0 U		
Aroclor-1232	[0.5]	1.0 U	1.0 U	1.0 U	1 U/1 U	1.0 U		
Aroclor-1242	[0.5]	1.0 U	1.0 U	1.0 U	1 U/1 U	1.0 U		
Aroclor-1248	[0.5]	1.0 U	1.0 U	1.0 U	1 U/1 U	1.0 U		
Aroclor-1254	[0.5]	1.0 U	1.0 U	1.0 U	1 U/1 U	1.0 U		
Aroclor-1260	[0.5]	1.0 U	1.0 U	1.0 U	1 U/1 U	1.0 U		
<b>Inorganics</b>								
Arsenic	[14.0]	4.2 U	<del>1.0 U</del>	3.0 U	1.7 U/1.7 U	2.0 U		
Chromium VI	[86.0]	10 U	10 U	10 U	10 U/10 U	10 U		
Lead	[26.8]	1.7 U	1.8 U	2.2 U	1.6 U/1.6 U	1.1 U		
Nickel	[100]	5.8 B	4.7 B	6.1 B	2.1 B/5.6 B	4.5 B		
Zinc	[152.0]	1.1 U	.70 U	1.1 U	4.6 U/4.6 U	2.5 B		
Cyanide	[23.9]	0.60 U	1.3 B	0.97 B	0.8 U/3.5 B	0.66 B		

**Notes:**

All concentrations are in ug/L.

Concentrations in bold exceed the Revised Site Specific Acceptable Stream Water Concentrations as presented in the December 22, 2000 Background Report.

[2] = Revised Site-Specific Acceptable Stream Concentrations as determined in the Background Surface and Subsurface Water Monitoring Report dated December 22, 2000, Table 6 values.

U = Analyte not detected. The value shown is the associated detection limit.

B = Analyte was also detected in the laboratory method blank (organic) or analyte value is <contract required detection limit but >= instrument detection limit (inorganic).

J = Estimated Value.

1 U/0.8 U = Sample result/duplicate sample result.

**TABLE B-13**  
**Summary of Analytical Results for Monitoring Well S-3**  
**ECC Superfund Site**  
**(Page 1 of 2)**

LOCATION ENVIRON SAMPLE ID SAMPLING QUARTER	Acceptable Stream Concentration	S-3 ECSGW3-01 4th 1998	S-3 ECSGW3-02 1st 1999	S-3 ECSGW3-03 2nd 1999	S-3 ECSGW3-04 3rd 1999	S-3 ECSGW3-05 4th 1999	S-3 ECSGW3-06 2nd 2000	S-3 ECSGW3-07 4th 2000
<b>Volatile Organics</b>								
1,1-Dichloroethene	[1.85]	0.5 U/0.5 U	0.5 U	0.5 U	0.5 U	0.5 U/0.5 U	0.5 U	1 U
1,2-Dichloroethene(total)	[9.4]	0.5 U/0.5 U	0.5 U	0.5 U	0.5 U	0.5 U/0.5 U	0.5 U	1 U
Ethylbenzene	[3.280]	0.5 U/0.5 U	0.5 U	0.5 U	0.5 U	0.1 U/0.5 U	0.5 U	1 U
Methylene Chloride	[15.7]	2.0 B/2.0 B	0.6 B	0.9	0.2 J	0.5 U/2.0	0.6 B	2 U
Tetrachloroethene	[8.85]	0.5 U/0.5 U	0.5 U	0.5 U	0.5 U	0.5 U/0.5 U	0.5 U	1 U
Toluene	[3.400]	0.5 U/0.5 U	0.5 U	0.5 U	0.5 U	0.5 U/0.5 U	0.2 J	1 U
1,1,1-Trichloroethane	[5.280]	0.5 U/0.5 U	0.5 U	0.5 U	0.5 U	0.5 U/0.5 U	0.5 U	1 U
1,1,2-Trichloroethane	[41.8]	0.5 U/0.5 U	0.5 U	0.5 U	0.5 U	0.5 U/0.5 U	0.5 U	1 U
Trichloroethene	[80.7]	0.5 U/0.5 U	0.5 U	0.3 J	0.5 U	0.5 U/0.5 U	0.5 U	1 U
Vinyl chloride	[525]	0.5 U/0.5 U	0.5 U	0.5 U	0.5 U	0.5 U/0.3 J	0.7	1
<b>Semi-Volatile Organics</b>								
Bis (2-ethylhexyl) phthalate	[50,000]	10 U / 10 U	10 U	10 U	10 U	10 U/10 U	10 U	10 U
Di-n-butyl phthalate	[154,000]	10 U / 10 U	10 U	10 U	10 U	10 U/10 U	10 U	10 U
1,2-Dichlorobenzene	[763]	10 U / 10 U	10 U	10 U	10 U	10 U/10 U	10 U	1 U
Diethylphthalate	[52,100]	10 U / 10 U	10 U	10 U	10 U	10 U/10 U	10 U	10 U
Naphthalene	[620]	10 U / 10 U	10 U	10 U	10 U	10 U/10 U	10 U	10 U
Phenol	[570]	10 U / 10 U	10 U	10 U	10 U	10 U/10 U	10 U	10 U
<b>Polychlorinated biphenyls</b>								
Aroclor-1016	[0.5]	1.0 U/1.0 U	0.48 U	0.5 U	0.52 U	0.46 U/0.5 U	0.51 U	1.0 U
Aroclor-1221	[1.0]	2.0 U/2.0 U	0.95 U	1 U	1 U	0.92 U/1.0 U	1.0 U	2.0 U
Aroclor-1232	[0.5]	1.0 U/1.0 U	0.48 U	0.5 U	0.52 U	0.46 U/0.5 U	0.51 U	1.0 U
Aroclor-1242	[0.5]	1.0 U/1.0 U	0.48 U	0.5 U	0.52 U	0.46 U/0.5 U	0.51 U	1.0 U
Aroclor-1248	[0.5]	1.0 U/1.0 U	0.48 U	0.5 U	0.52 U	0.46 U/0.5 U	0.51 U	1.0 U
Aroclor-1254	[0.5]	1.0 U/1.0 U	0.48 U	0.5 U	0.52 U	0.46 U/0.5 U	0.51 U	1.0 U
Aroclor-1260	[0.5]	1.0 U/1.0 U	0.48 U	0.5 U	0.52 U	0.46 U/0.5 U	0.51 U	1.0 U
<b>Inorganics</b>								
Arsenic	[14.0]	1.7 U/1.7 U	1.4 U	1.7 U	2.0 U	7.6 U/7.6 U	2.1 U	3.4 U
Chromium VI	[86.0]	10 U / 10 U	10 U	10 U	10.0 U	10.0 U/10.0 U	10 U	10 U
Lead	[26.8]	0.7 U/0.76 B	0.7 U	1 U	1.0 U	1.5 U/1.5 U	1.1 U	2.1 U
Nickel	[100]	2.3 B/2.2 B	2.8 B	10.4	8.8	9.0/9.1	8.7	9.1 B
Zinc	[152.0]	1.5 U/1.5 U	0.8 U	0.4 U	1.1 U	3.1 U/3.1 U	3.6 U	1.2 U
Cyanide	[23.9]	10 U / 10 U	10 U	4.7 U	2.8 U	8.2 U/8.2 U	0.90 U	0.90 U

**Notes:**

All concentrations are in ug/L.

Concentrations in bold exceed the Revised Site Specific Acceptable Stream Water Concentrations as presented in the December 22, 2000 Background Report.

[2] = Revised Site-Specific Acceptable Stream Concentrations as determined in the Background Surface and Subsurface Water Monitoring Report dated December 22, 2000, Table 6 values.

U = Analyte not detected. The value shown is the associated detection limit.

B = Analyte was also detected in the laboratory method blank (organic) or analyte value is <contract required detection limit but >= instrument detection limit (inorganic).

J = Estimated Value.

1 U/0.8 U = Sample result/duplicate sample result.

**TABLE B-13**  
**Summary of Analytical Results for Monitoring Well S-3**  
**ECC Superfund Site**  
**(Page 2 of 2)**

LOCATION ENVIRON SAMPLE ID SAMPLING QUARTER	Acceptable Stream Concentration	S-3 ECSGW3-08 1st 2001	S-3 ECSGW3-09 3rd 2001	S-3 ECSGW3-11 1st 2002				
<b>Volatile Organics</b>								
1,1-Dichloroethene	[1.85]	1 U	1 U	1 U				
1,2-Dichloroethene (total)	[9.4]	1 U	1 U	0.1 J				
Ethylbenzene	[3.280]	1 U	1 U	1 U				
Methylene Chloride	[15.7]	0.7 J	2 U	2 U				
Tetrachloroethene	[8.85]	1 U	1 U	1 U				
Toluene	[3.400]	0.1 J	1 U	1 U				
1,1,1-Trichloroethane	[5.280]	1 U	1 U	1 U				
1,1,2-Trichloroethane	[41.8]	1 U	1 U	1 U				
Trichloroethene	[80.7]	1 U	1 U	1 U				
Vinyl chloride	[525]	1	5	11				
<b>Semi-Volatile Organics</b>								
Bis (2-ethylhexyl) phthalate	[50,000]	10 U	10 U	10 U				
Di-n-butyl phthalate	[154,000]	10 U	10 U	10 U				
1,2-Dichlorobenzene	[763]	1 U	1 U	0.02 J				
Diethylphthalate	[52,100]	10 U	10 U	10 U				
Naphthalene	[620]	10 U	10 U	10 U				
Phenol	[570]	10 U	10 U	10 U				
<b>Polychlorinated biphenyls</b>								
Aroclor-1016	[0.5]	1.0 U	1.0 U	1 U				
Aroclor-1221	[1.0]	2.0 U	2.0 U	2 U				
Aroclor-1232	[0.5]	1.0 U	1.0 U	1 U				
Aroclor-1242	[0.5]	1.0 U	1.0 U	1 U				
Aroclor-1248	[0.5]	1.0 U	1.0 U	1 U				
Aroclor-1254	[0.5]	1.0 U	1.0 U	1 U				
Aroclor-1260	[0.5]	1.0 U	1.0 U	1 U				
<b>Inorganics</b>								
Arsenic	[14.0]	4.2 U	1.2 U	1.7 U				
Chromium VI	[86.0]	10 U	10 U	10 U				
Lead	[26.8]	1.7 U	1.8 U	1.6 U				
Nickel	[100]	9.5 B	12.3 B	8 B				
Zinc	[152.0]	1.1 U	.70 U	4.6 U				
Cyanide	[23.9]	0.6 U	.80 U	0.8 U				

**Notes:**

All concentrations are in ug/L.

Concentrations in bold exceed the Revised Site Specific Acceptable Stream Water Concentrations as presented in the December 22, 2000 Background Report.

[2] = Revised Site-Specific Acceptable Stream Concentrations as determined in the Background Surface and Subsurface Water Monitoring Report dated December 22, 2000, Table 6 values.

U = Analyte not detected. The value shown is the associated detection limit.

B = Analyte was also detected in the laboratory method blank (organic) or analyte value is <contract required detection limit but >= instrument detection limit (inorganic).

J = Estimated Value.

1 U/0.8 U = Sample result/duplicate sample result.

**TABLE B-14**  
**Summary of Analytical Results for Monitoring Well S-4A**  
**ECC Superfund Site**  
**(Page 1 of 2)**

LOCATION ENVIRON SAMPLE ID SAMPLING QUARTER	Acceptable Stream Concentration	S-4 ECSGW4-01 4th 1998	S-4A ECSGW4-02 1st 1999	S-4A ECSGW4-03 2nd 1999	S-4A ECSGW4-04 3rd 1999	S-4A ECSGW4-05 4th 1999	S-4A ECSGW4-06 2nd 2000	S-4A ECSGW4-07 4th 2000
<b>Volatile Organics</b>								
1,1-Dichloroethene	[1.85]	0.5 U/0.5 U	2 U	4 U/4 U	0.5 U/0.5 U	0.5 U	0.5 U/0.5 U	1 U
1,2-Dichloroethene(total)	[9.4]	0.5 U/1.0	87	100/87	85.8 D/91.9 D	66.5 E	62/36	73 D
Ethylbenzene	[3,280]	0.5 J/0.5 U	2 U	4 U/4 U	0.5 U/0.5 U	0.5 U	0.5 U/0.5 U	1 U
Methylene Chloride	[15.7]	2 B/3 B	3 B	4 U/4 U	0.3 J/0.3 J	1.0	3 D/ 3 JB	0.8 J
Tetrachloroethene	[8.85]	0.5 U/0.5 U	2 U	4 U/4 U	0.5 U/0.5 U	0.5 U	0.5 U/0.5 U	1 U
Toluene	[3,400]	0.5 U/0.5 U	2 U	4 U/4 U	0.5 U/0.5 U	0.5 U	0.7 J/0.7 J	1 U
1,1,1-Trichloroethane	[5,280]	0.5 U/0.5 U	2 U	4 U/4 U	0.5 U/0.5 U	0.5 U	0.5 U/0.5 U	1 U
1,1,2-Trichloroethane	[41.8]	0.5 U/0.5 U	2 U	4 U/4 U	0.5 U/0.5 U	0.5 U	0.5 U/0.5 U	1 U
Trichloroethene	[80.7]	0.5 U/0.5 U	2 U	4 U/4 U	0.5 U/0.5 U	0.5 U	0.5 U/0.5 U	1 U
Vinyl chloride	[525]	0.5 U/0.5 U	2 J	3 J/ 3J	0.5 U/0.5 U	7.0	3/2 J	5
<b>Semi-Volatile Organics</b>								
Bis (2-ethylhexyl) phthalate	[50,000]	10 U/10 U	10 U	10 U/1 J	10 U/10 U	10 U	9 U/11 U	10 U
Di-n-butyl phthalate	[154,000]	10 U/10 U	10 U	10 U/10 U	10 U/10 U	10 U	9 U/11 U	10 U
1,2-Dichlorobenzene	[763]	10 U/10 U	10 U	10 U/10 U	10 U/10 U	10 U	9 U/11 U	1 U
Diethylphthalate	[52,100]	10 U/10 U	10 U	10 U/10 U	10 U/10 U	10 U	9 U/11 U	10 U
Naphthalene	[620]	10 U/10 U	10 U	10 U/10 U	10 U/10 U	10 U	9 U/11 U	10 U
Phenol	[570]	10 U/10 U	10 U	10 U/10 U	10 U/10 U	10 U	9 U/11 U	10 U
<b>Polychlorinated biphenyls</b>								
Aroclor-1016	[0.5]	1 U/0.95 U	0.50 U	0.47 U/0.51 U	0.55 U/0.52 U	0.50 U	0.47 U/0.48 U	1.0 U
Aroclor-1221	[1.0]	2 U/ 1.9 U	1.0 U	0.93 U/1.0 U	1.1 U/1.0 U	1.0 U	0.94 U/0.95 U	2.0 U
Aroclor-1232	[0.5]	1 U/0.95 U	0.50 U	0.47 U/0.51 U	0.55 U/0.52 U	0.50 U	0.47 U/0.48 U	1.0 U
Aroclor-1242	[0.5]	1 U/0.95 U	0.50 U	0.47 U/0.51 U	0.55 U/0.52 U	0.50 U	0.47 U/0.48 U	1.0 U
Aroclor-1248	[0.5]	1 U/0.95 U	0.50 U	0.47 U/0.51 U	0.55 U/0.52 U	0.50 U	0.47 U/0.48 U	1.0 U
Aroclor-1254	[0.5]	1 U/0.95 U	0.50 U	0.47 U/0.51 U	0.55 U/0.52 U	0.50 U	0.47 U/0.48 U	1.0 U
Aroclor-1260	[0.5]	1 U/0.95 U	0.50 U	0.47 U/0.51 U	0.55 U/0.52 U	0.50 U	0.47 U/0.48 U	1.0 U
<b>Inorganics</b>								
Arsenic	[14.0]	1.7 U/1.7 U	1.0 U	2.0 B/1.4 U	2.0 U/2.0 U	7.6 U	2.1 U/2.1 U	3.4 U
Chromium VI	[86.0]	10 U/10 U	10 U	10 U/10 U	10.0 U/10.0 U	10.0 U	11.2 U/10 U	10 U
Lead	[26.8]	0.7 U/0.7 U	1.2 B	1.0 U/1.0 U	1.0 U/1.0 U	1.5 U	1.1 U/1.1 U	2.1 U
Nickel	[100]	0.7 U/0.84 B	1.6 B	2.1 B/1.4 B	1.0 U/1.0 U	1.1 U	3.2 U/3.2 U	1.9 B
Zinc	[152.0]	1.5 U/1.5 U	0.8 U	0.40 U/0.4 U	1.1 U/1.1 U	3.1 U	3.6 U/3.6 U	1.2 U
Cyanide	[23.9]	10 U/10 U	10 U	4.7 U/4.7 U	2.8 U/2.8 U	8.2 U	0.90 U/0.90 U	0.90 U

**Notes:**

All concentrations are in ug/L.

Concentrations in bold exceed the Revised Site Specific Acceptable Stream Water Concentrations as presented in the December 22, 2000 Background Report.

(2) = Revised Site-Specific Acceptable Stream Concentrations as determined in the Background Surface and Subsurface Water Monitoring Report dated December 22, 2000, Table 6 values.

U = Analyte not detected. The value shown is the associated detection limit.

B = Analyte was also detected in the laboratory method blank (organic) or analyte value is <contract required detection limit but >= instrument detection limit (inorganic).

J = Estimated Value.

D = Sample quantitated on a diluted sample.

E = Exceeds the upper limit of the calibration range of the instrument for that specific compound.

1 U/0.8 U = Sample result/duplicate sample result.



**TABLE B-14**  
**Summary of Analytical Results for Monitoring Well S-4A**  
**ECC Superfund Site**  
**(Page 2 of 2)**

LOCATION ENVIRON SAMPLE ID SAMPLING QUARTER	Acceptable Stream Concentration	S-4A ECSGW4-08 1st 2001	S-4A ECSGW4-09 3rd 2001	S-4A ECSGW4-11 1st 2002				
<b>Volatile Organics</b>								
1,1-Dichloroethene	[1.85]	5 U	1 U	0.3 J				
1,2-Dichloroethene(total)	[9.4]	<b>86</b>	<b>43 D</b>	<b>200 D</b>				
Ethylbenzene	[3,280]	5 U	1 U	0.2 J				
Methylene Chloride	[15.7]	10 U	2 U	0.8 J				
Tetrachloroethene	[8.85]	2 J	1 U	17 U				
Toluene	[3,400]	5 U	1 U	3 B				
1,1,1-Trichloroethane	[5,280]	5 U	1 U	2				
1,1,2-Trichloroethane	[41.8]	5 U	1 U	1 U				
Trichloroethene	[80.7]	5 U	1 U	24				
Vinyl chloride	[525]	6	16	13				
<b>Semi-Volatile Organics</b>								
Bis (2-ethylhexyl) phthalate	[50,000]	11 U	5 J	10 U				
Di-n-butyl phthalate	[154,000]	11 U	10 U	10 U				
1,2-Dichlorobenzene	[763]	5 U	1 U	0.6 J				
Diethylphthalate	[52,100]	11 U	10 U	10 U				
Naphthalene	[620]	11 U	10 U	10 U				
Phenol	[570]	11 U	10 U	10 U				
<b>Polychlorinated biphenyls</b>								
Aroclor-1016	[0.5]	1.0 U	1 U	1 U				
Aroclor-1221	[1.0]	2.0 U	2 U	2 U				
Aroclor-1232	[0.5]	1.0 U	1 U	1 U				
Aroclor-1242	[0.5]	1.0 U	1 U	1 U				
Aroclor-1248	[0.5]	1.0 U	1 U	1 U				
Aroclor-1254	[0.5]	1.0 U	1 U	1 U				
Aroclor-1260	[0.5]	1.0 U	1 U	1 U				
<b>Inorganics</b>								
Arsenic	[14.0]	4.2 U	1.2 U	1.7 U				
Chromium VI	[86.0]	10 U	10 U	10 U				
Lead	[26.8]	1.7 U	1.8 U	1.6 U				
Nickel	[100]	1.3 U	1.4 U	1 U				
Zinc	[152.0]	1.1 U	0.7	4.6 U				
Cyanide	[23.9]	0.60 U	.80 U	0.8 U				

**Notes:**

All concentrations are in ug/L.

Concentrations in bold exceed the Revised Site Specific Acceptable Stream Water Concentrations as presented in the December 22, 2000 Background Report.

[2] = Revised Site-Specific Acceptable Stream Concentrations as determined in the Background Surface and Subsurface Water Monitoring Report dated December 22, 2000, Table 6 values.

U = Analyte not detected. The value shown is the associated detection limit.

B = Analyte was also detected in the laboratory method blank (organic) or analyte value is <contract required detection limit but >= instrument detection limit (inorganic).

D = Sample quantitated on a diluted sample.

J = Estimated Value.

1 U/0.8 U = Sample result/duplicate sample result.

**TABLE B-15**  
**Summary of Analytical Results for Monitoring Well ECC MW13**  
**ECC Superfund Site**  
**(Page 1 of 2)**

LOCATION ENVIRON SAMPLE ID SAMPLING QUARTER	Acceptable Stream Concentration	ECC MW-13 ECTGWMW13-01 4th 1998	ECC MW13 ECSGWMW1302 1st 1999	ECC MW13 ECSL-WMW-13 2nd 1999	MW13 ECSGWM13-04 3rd 1999	MW13 ECSGWM13-05 4th 1999	MW13 ECSGWM13-06 2nd 2000	MW13 ECSGWM13-07 4th 2000
<b>Volatile Organics</b>								
1,1-Dichloroethene	[1.85]	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
1,2-Dichloroethene(total)	[9.4]	<b>46</b>	<del>46</del>	<del>0.5</del>	<del>0.3</del>	<del>3.0</del>	1	1
Ethylbenzene	[3,280]	3	1	0.5	0.5 U	0.2 J	0.5 U	1 U
Methylene Chloride	[15.7]	3 B	1 B	1 B	0.8	1.0	3 B	0.7 J
Tetrachloroethene	[8.85]	1 U	1 U	0.5 U	0.5 U	0.4 J	0.1 J	1 U
Toluene	[3,400]	0.5 J	1 U	0.5 U	0.5 U	0.2 J	0.4 J	1 U
1,1,1-Trichloroethane	[5,280]	2	0.9 J	0.7	0.3 J	0.6	0.4 J	0.2 J
1,1,2-Trichloroethane	[41.8]	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Trichloroethene	[80.7]	1 U	0.5 J	0.6	0.5 J	0.7	0.5	0.5 J
Vinyl chloride	[525]	1 U	3	0.5 U	0.6	2.0	0.4 J	0.3 J
<b>Semi-Volatile Organics</b>								
Bis (2-ethylhexyl) phthalate	[50,000]	10 U	10 U	9 U	10 U	10 U	10 U	10 U
Di-n-butyl phthalate	[154,000]	10 U	10 U	9 U	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	[763]	10 U	10 U	9 U	10 U	10 U	10 U	1 U
Diethylphthalate	[52,100]	10 U	10 U	9 U	1.0 J	10 U	10 U	10 U
Naphthalene	[620]	10 U	10 U	9 U	10 U	10 U	10 U	10 U
Phenol	[570]	10 U	10 U	9 U	10 U	10 U	10 U	10 U
<b>Polychlorinated biphenyls</b>								
Aroclor-1016	[0.5]	1 U	0.47 U	0.50 U	0.52 U	0.46 U	0.53 U	1.0 U
Aroclor-1221	[1.0]	2 U	0.94 U	1.0 U	1.0 U	0.92 U	1.0 U	2.0 U
Aroclor-1232	[0.5]	1 U	0.47 U	0.50 U	0.52 U	0.46 U	0.53 U	1.0 U
Aroclor-1242	[0.5]	1 U	0.47 U	0.50 U	0.52 U	0.46 U	0.53 U	1.0 U
Aroclor-1248	[0.5]	1 U	0.47 U	0.50 U	0.52 U	0.46 U	0.53 U	1.0 U
Aroclor-1254	[0.5]	1 U	0.47 U	0.50 U	0.52 U	0.46 U	0.53 U	1.0 U
Aroclor-1260	[0.5]	1 U	0.47 U	0.50 U	0.52 U	0.46 U	0.53 U	1.0 U
<b>Inorganics</b>								
Arsenic	[14.0]	<del>0.47</del>	<del>0.4 B</del>	<del>12.7</del>	<b>21.5</b>	<b>23</b>	<del>11.6</del>	<b>21.2</b>
Chromium VI	[86.0]	10 U	10 U	10 U	10.0 U	10.0 U	10 U	10 U
Lead	[26.8]	0.7 U	0.7 U	1.0 U	2.5 B	1.5 U	1.1 U	2.1 U
Nickel	[100]	14	6.2	4.8 B	6.2	6.0	7.8	8.9 B
Zinc	[152.0]	26.5	0.8 U	0.40 U	1.1 U	3.1 U	3.6 U	1.2 U
Cyanide	[23.9]	10 U	10 U	4.7 U	2.8 U	8.2 U	0.90 U	1.4 B

**Notes:**

All concentrations are in ug/L.

Concentrations in bold exceed the Revised Site Specific Acceptable Stream Water Concentrations as presented in the December 22, 2000 Background Report.

[2] = Revised Site-Specific Acceptable Stream Concentrations as determined in the Background Surface and Subsurface Water Monitoring Report dated December 22, 2000, Table 6 values.

U = Analyte not detected. The value shown is the associated detection limit.

B = Analyte was also detected in the laboratory method blank (organic) or analyte value is <contract required detection limit but >= instrument detection limit (inorganic).

J = Estimated Value.

**TABLE B-15**  
**Summary of Analytical Results for Monitoring Well ECC MW13**  
**ECC Superfund Site**  
**(Page 2 of 2)**

LOCATION ENVIRON SAMPLE ID SAMPLING QUARTER	Acceptable Stream Concentration	MW13 ECSGWM13-08 1st 2001	MW13 ECSGWM13-09 3rd 2001	MW13 ECSGWM13-10 4th 2001	MW13 ECSGWM13-11 1st 2002	MW-13 ECSGWM13-12 2nd 2002		
<b>Volatile Organics</b>								
1,1-Dichloroethene	[1.85]	1 U	1 U	1 U	1 U	1 U		
1,2-Dichloroethene(total)	[9.4]	1 U	1	0.6 J	0.4 J	1 U		
Ethylbenzene	[3,280]	1 U	1 U	1 U	1 U	1 U		
Methylene Chloride	[15.7]	0.7 J	2 U	2 U	2 U	0.2 J		
Tetrachloroethene	[8.85]	1 U	0.5 J	1 U	1 U	1 U		
Toluene	[3,400]	1 U	0.2 J	0.3 J	1 U	1 U		
1,1,1-Trichloroethane	[5,280]	0.3 J	0.2 J	1 U	1 U	1 U		
1,1,2-Trichloroethane	[41.8]	1 U	1 U	1 U	1 U	1 U		
Trichloroethene	[80.7]	0.4 J	0.6 J	0.4 J	0.3 J	1 U		
Vinyl chloride	[525]	1 U	0.6 J	0.5 J	0.2 J	1 U		
<b>Semi-Volatile Organics</b>								
Bis (2-ethylhexyl) phthalate	[50,000]	10 U	10 U	1 J	10 U	5 J		
Di-n-butyl phthalate	[154,000]	10 U	10 U	10 U	10 U	10 U		
1,2-Dichlorobenzene	[763]	1 U	1 U	1 U	1 U	1 U		
Diethylphthalate	[52,100]	10 U	10 U	0.5 J	0.3 J	10 U		
Naphthalene	[620]	10 U	10 U	10 U	10 U	10 U		
Phenol	[570]	10 U	10 U	10 U	10 U	10 U		
<b>Polychlorinated biphenyls</b>								
Aroclor-1016	[0.5]	1.0 U	1.0 U	1.0 U	1 U	1.0 U		
Aroclor-1221	[1.0]	2.0 U	2.0 U	2.0 U	2 U	2.0 U		
Aroclor-1232	[0.5]	1.0 U	1.0 U	1.0 U	1 U	1.0 U		
Aroclor-1242	[0.5]	1.0 U	1.0 U	1.0 U	1 U	1.0 U		
Aroclor-1248	[0.5]	1.0 U	1.0 U	1.0 U	1 U	1.0 U		
Aroclor-1254	[0.5]	1.0 U	1.0 U	1.0 U	1 U	1.0 U		
Aroclor-1260	[0.5]	1.0 U	1.0 U	1.0 U	1 U	1.0 U		
<b>Inorganics</b>								
Arsenic	[14.0]	<b>18.5</b>	<b>26.8</b>	<b>24.2</b>	<del>20.1</del>	<b>2.3 B</b>		
Chromium VI	[86.0]	<del>10.0</del>	10 U	10 U	10 U	10 U		
Lead	[26.8]	1.7 U	1.8 U	2.2 U	1.6 U	1.1 U		
Nickel	[100]	6.2 B	4.7 B	5.5 B	1 U	2.1 B		
Zinc	[152.0]	1.1 U	0.70 U	1.1 U	4.6 U	2.3 B		
Cyanide	[23.9]	0.77 B	0.80 U	1.9 B	0.8 U	0.60 U		

**Notes:**

All concentrations are in ug/L.

Concentrations in bold exceed the Revised Site Specific Acceptable Stream Water Concentrations as presented in the December 22, 2000 Background Report

[2] = Revised Site-Specific Acceptable Stream Concentrations as determined in the Background Surface and Subsurface Water Monitoring Report dated December 22, 2000, Table 6 values.

U = Analyte not detected. The value shown is the associated detection limit.

B = Analyte was also detected in the laboratory method blank (organic) or analyte value is <contract required detection limit but >= instrument detection limit (inorganic).

J = Estimated Value.

TABLE B-16  
Summary of Analytical Results for Location SW-1  
ECC Superfund Site  
(Page 1 of 2)

SAMPLE LOCATION ENVIRON SAMPLE ID SAMPLING QUARTER	Acceptable Stream Concentration	SW-1 ECSW1-01 4th 1998	SW-1 ECSW1-02 1st 1999	SW-1 ECSW1-03 2nd 1999	SW-1 ECSW1-06 2nd 2000	SW-1 ECSW1-07 4th 2000	SW-1 ECSW1-08 1st 2001	SW-1 ECSW1-09 3rd 2001
<b>Volatile Organics</b>								
1,1-Dichloroethene	[1.85]	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	1 U	1 U
1,2-Dichloroethene(total)	[9.4]*	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	1 U	1 U
Ethylbenzene	[3,280]	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	1 U	1 U
Methylene chloride	[15.7]	1 B	0.8 B	1	0.8	2.0 U	2 U	2 U
Tetrachloroethene	[8.85]	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	1 U	1 U
Toluene	[3,400]	0.5 U	0.5 U	0.5 U	0.2 J	1.0 U	1 U	1 U
1,1,1-Trichloroethane	[5,280]	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	1 U	1 U
1,1,2-Trichloroethane	[41.8]	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	1 U	1 U
Trichloroethene	[80.7]	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	1 U	1 U
Vinyl chloride	[525]	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	1 U	1 U
<b>Semi-Volatile Organics</b>								
Bis (2-ethylhexyl) phthalate	[50,000]	10 U	2 J	5 J	10 U	11 U	10 U	10 U
Di-n-butyl phthalate	[154,000]	10 U	10 U	10 U	10 U	11 U	10 U	10 U
1,2-Dichlorobenzene	[763]	10 U	10 U	10 U	10 U	1 U	1 U	1 U
Diethyl phthalate	[52,100]	10 U	10 U	10 U	10 U	11 U	10 U	10 U
Naphthalene	[620]	10 U	10 U	10 U	10 U	11 U	10 U	10 U
Phenol	[570]	10 U	10 U	10 U	10 U	11 U	10 U	10 U
<b>Polychlorinated biphenyls</b>								
Aroclor 1016	[0.5]	1 U	0.48 U	0.5 U	0.50 U	1.0 U	1 U	1 U
Aroclor 1221	[1.0]	2 U	0.97 U	1 U	1.0 U	2.0 U	2 U	2 U
Aroclor 1232	[0.5]	1 U	0.48 U	0.5 U	0.50 U	1.0 U	1 U	1 U
Aroclor 1242	[0.5]	1 U	0.48 U	0.5 U	0.50 U	1.0 U	1 U	1 U
Aroclor 1248	[0.5]	1 U	0.48 U	0.5 U	0.50 U	1.0 U	1 U	1 U
Aroclor 1254	[0.5]	1 U	0.48 U	0.5 U	0.50 U	1.0 U	1 U	1 U
Aroclor 1260	[0.5]	1 U	0.48 U	0.5 U	0.50 U	1.0 U	1 U	1 U
<b>Inorganics</b>								
Arsenic	[14.0]	1.7 U	1.4 U	2.9 B	2.1 U	3.4 U	4.2 U	2.8 U
Chromium VI	[86.0]	10 U	10 U	10 U	10 U	10 U	10.4	10 U
Lead	[26.8]	0.7 U	1.6 B	1 U	1.1 U	2.1 U	1.7 U	1.6 U
Nickel	[100]	15.9 U	8.2	20.5	9.2	6.2 B	10 B	15.4 B
Zinc	[152.0]	1.5 U	3.8 B	14.2 B	3.6 U	1.2 U	1.1 U	9.7 B
Cyanide	[23.9]	10 U	10 U	10 B	2.1 B	2.4 B	1.8 B	5 B

**Notes:**

All concentrations are in ug/L.

Concentrations in bold exceed the Acceptable Stream Concentrations as presented in Revised Exhibit A, Table 3-1.

[2] = Revised Site-Specific Acceptable Stream Concentrations as determined in the Background Surface and Subsurface Water Monitoring Report dated December 22, 2000, Table 6 values.

U = Analyte not detected. The value shown is the associated detection limit.

B = Analyte was also detected in the laboratory method blank (organic) or analyte value is <contract required detection limit but >= instrument detection limit (inorganic).

J = Estimated Value.

D = Compound quantitated on a diluted sample.

**TABLE B-16**  
**Summary of Analytical Results for Location SW-1**  
**ECC Superfund Site**  
**(Page 2 of 2)**

SAMPLE LOCATION ENVIRON SAMPLE ID SAMPLING QUARTER	Acceptable Stream Concentration	SW-1 ECSW1-10 4th 2001	SW-1 ECSW1-11 1st 2002	SW-1 ECSW1-12 2nd 2002				
<i>Volatile Organics</i>								
1,1-Dichloroethene	[1.85]	1 U/1 U	1 U	1 U				
1,2-Dichloroethene(total)	[9.4]*	0.3 J/0.3 J	1 U	1 U				
Ethylbenzene	[3,280]	1 U/1 U	1 U	1 U				
Methylene chloride	[15.7]	2 U/2 U	2 U	2 U				
Tetrachloroethene	[8.85]	1 U/1 U	1 U	1 U				
Toluene	[3,400]	0.7 J/0.5 J	0.2 JB	0.2 J				
1,1,1-Trichloroethane	[5,280]	1 U/1 U	1 U	1 U				
1,1,2-Trichloroethane	[41.8]	1 U/1 U	1 U	1 U				
Trichloroethene	[80.7]	1 U/1 U	1 U	1 U				
Vinyl chloride	[525]	0.2 J/0.1 J	1 U	1 U				
<i>Semi-Volatile Organics</i>								
Bis (2-ethylhexyl) phthalate	[50,000]	10 U/1 JB	10 U	10 U				
Di-n-butyl phthalate	[154,000]	10 U/10 U	10 U	10 U				
1,2-Dichlorobenzene	[763]	0.3 J/0.2 J	1 U	1 U				
Diethyl phthalate	[52,100]	10 U/10 U	10 U	10 U				
Naphthalene	[620]	10 U/10 U	10 U	10 U				
Phenol	[570]	10 U/10 U	10 U	10 U				
<i>Polychlorinated biphenyls</i>								
Aroclor 1016	[0.5]	1 U/1 U	1 U	1 U				
Aroclor 1221	[1.0]	2 U/2 U	2 U	2 U				
Aroclor 1232	[0.5]	1 U/1 U	1 U	1 U				
Aroclor 1242	[0.5]	1 U/1 U	1 U	1 U				
Aroclor 1248	[0.5]	1 U/1 U	1 U	1 U				
Aroclor 1254	[0.5]	1 U/1 U	1 U	1 U				
Aroclor 1260	[0.5]	1 U/1 U	1 U	1 U				
<i>Inorganics</i>								
Arsenic	[14.0]	<del>5.4 B/5.4 B</del>	1.7 U	2 U				
Chromium VI	[86.0]	10 U/10 U	10 U	10 U				
Lead	[26.8]	5.4/5.4	1.6 U	2.5 B				
Nickel	[100]	11.8 B/11.16 B	5.3 B	6 B				
Zinc	[152.0]	21.4/20.4	4.6 U	12.8 B				
Cyanide	[23.9]	4 E/1.9 B	2 B	2.8 B				

**Notes:**

All concentrations are in ug/L.

Concentrations in bold exceed the Acceptable Stream Concentrations as presented in Revised Exhibit A, Table 3-1.

[2] = Revised Site-Specific Acceptable Stream Concentrations as determined in the Background Surface and Subsurface Water Monitoring Report dated

U = Analyte not detected. The value shown is the associated detection limit.

B = Analyte was also detected in the laboratory method blank (organic) or analyte value is <contract required detection limit but >= instrument

J = Estimated Value.

D = Compound quantitated on a diluted sample.

0.5 U/0.5 U = Sample result/duplicate sample results.

**TABLE B-17**  
**Summary of Analytical Results for Location SW-2**  
**ECC Superfund Site**  
**(Page 1 of 2)**

SAMPLE LOCATION ENVIRON SAMPLE ID SAMPLING QUARTER	Acceptable Stream Concentration	SW-2 ECSW2-01 4th 1998	SW-2 ECSW2-02 1st 1999	SW-2 ECSW2-03 2nd 1999	SW-2 ECSW2-06 2nd 2000	SW-2 ECSW2-07 4th 2000	SW-2 ECSW2-08 1st 2001	SW-2 ECSW2-09 3rd 2001
<b>Volatile Organics</b>								
1,1-Dichloroethene	[1.85]	0.5 U/0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	1 U	1 U
1,2-Dichloroethene (total)	[9.4]	0.5 U/0.3 U	0.8	1	0.3 J	0.6 J	2	0.3 J
Ethylbenzene	[3,280]	0.5 U/0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	1 U	1 U
Methylene Chloride	[15.7]	2 B/1 B	0.8 B	2 B	1	0.9 J	2 U	2 U
Tetrachloroethene	[8.85]	0.5 U/0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	1 U	1 U
Toluene	[3,400]	0.5 U/0.5 U	0.5 U	0.5 U	0.2 J	0.2 J	0.2 J	1 U
1,1,1-Trichloroethane	[5,280]	0.5 U/0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	0.2 J	1 U
1,1,2-Trichloroethane	[41.8]	0.5 U/0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	1 U	1 U
Trichloroethene	[80.7]	0.5 U/0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	1 U	1 U
Vinyl Chloride	[525]	0.5 U/0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	1	0.2 J
<b>Semi-Volatile Organics</b>								
Bis (2-ethylhexyl) phthalate	[50,000]	10 U/10 U	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-butyl phthalate	[154,000]	10 U/10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	[763]	10 U/10 U	10 U	10 U	10 U	1 U	1 U	10 U
Diethyl Phthalate	[52,100]	10 U/10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	[620]	10 U/10 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenol	[570]	10 U/10 U	10 U	10 U	10 U	10 U	10 U	10 U
<b>Polychlorinated biphenyls</b>								
Aroclor 1016	[0.5]	1 U/1 U	0.48 U	0.50 U	0.46 U	1.0 U	1 U	1 U
Aroclor 1221	[1.0]	2 U/2 U	0.95 U	0.99 U	0.93 U	2.0 U	2 U	2 U
Aroclor 1232	[0.5]	1 U/1 U	0.48 U	0.50 U	0.46 U	1.0 U	1 U	1 U
Aroclor 1242	[0.5]	1 U/1 U	0.48 U	0.50 U	0.46 U	1.0 U	1 U	1 U
Aroclor 1248	[0.5]	1 U/1 U	0.48 U	0.50 U	0.46 U	1.0 U	1 U	1 U
Aroclor 1254	[0.5]	1 U/1 U	0.48 U	0.50 U	0.46 U	1.0 U	1 U	1 U
Aroclor 1260	[0.5]	1 U/1 U	0.48 U	0.50 U	0.46 U	1.0 U	1 U	1 U
<b>Inorganics</b>								
Arsenic	[14.0]	<del>1.4 B</del>	1.4 U	<del>1.4 B</del>	2.1 U	3.4 U	4.2 U	2.8 U
Chromium VI	[86.0]	10 U/10 U	10 U	10 U	10 U	10 U	10 U	10 U
Lead	[26.8]	0.7 U/0.7 U	1.2 B	1.0 U	1.1 U	2.1 U	1.7 U	1.6 U
Nickel	[100]	13.5 U/14 U	8.3	19.7	9	6.1 B	9.7 B	16.5 B
Zinc	[152.0]	1.5 U/1.5 U	2.4 B	6.5 B	3.6 U	1.2 U	1.1 U	1.1 B
Cyanide (Total)	[23.9]	10 U/10 U	10 U	<del>1.4 B</del>	2.1 B	2.6 B	1.9 B	3.5 B

**Notes:**

All concentrations are in ug/L.

Concentrations in bold exceed the Acceptable Stream Concentrations as presented in Revised Exhibit A, Table 3-1.

[2] = Revised Site-Specific Acceptable Stream Concentrations as determined in the Background Surface and Subsurface Water Monitoring Report dated December 22, 2000, Table 6 values.

U = Analyte not detected. The value shown is the associated detection limit.

B = Analyte was also detected in the laboratory method blank (organic) or analyte value is <contract required detection limit but >= instrument detection limit (inorganic).

J = Estimated Value.

D = Compound quantitated on a diluted sample.

0.5 U/0.5 U = Sample result/duplicate sample result.

**TABLE B-17**  
**Summary of Analytical Results for Location SW-2**  
**ECC Superfund Site**  
**(Page 2 of 2)**

SAMPLE LOCATION ENVIRON SAMPLE ID SAMPLING QUARTER	Acceptable Stream Concentration	SW-2 ECSW2-10 4th 2001	SW-2 ECSW2-11 1st 2002	SW-2 ECSW2-12 2nd 2002				
<b>Volatile Organics</b>								
1,1-Dichloroethene	[1.85]	1 U	1 U	1 U				
1,2-Dichloroethene (total)	[9.4]	<del>1 U</del>	<del>1 U</del>	1 U				
Ethylbenzene	[3,280]	1 U	1 U	1 U				
Methylene Chloride	[15.7]	2 U	2 U	0.2 J				
Tetrachloroethene	[8.85]	1 U	1 U	1 U				
Toluene	[3,400]	0.9 J	1 U	0.2 J				
1,1,1-Trichloroethane	[5,280]	1 U	1 U	1 U				
1,1,2-Trichloroethane	[41.8]	1 U	1 U	1 U				
Trichloroethene	[80.7]	1 U	1 U	1 U				
Vinyl Chloride	[523]	7	0.9 J	1 U				
<b>Semi-Volatile Organics</b>								
Bis (2-ethylhexyl) phthalate	[50,000]	10 U	10 U	2 J				
Di-n-butyl phthalate	[154,000]	10 U	10 U	10 U				
1,2-Dichlorobenzene	[763]	10 U	1 U	1 U				
Diethyl Phthalate	[52,100]	10 U	10 U	10 U				
Naphthalene	[620]	10 U	10 U	10 U				
Phenol	[570]	10 U	10 U	10 U				
<b>Polychlorinated biphenyls</b>								
Aroclor 1016	[0.5]	1 U	1 U	1 U				
Aroclor 1221	[1.0]	2 U	2 U	2 U				
Aroclor 1232	[0.5]	1 U	1 U	1 U				
Aroclor 1242	[0.5]	1 U	1 U	1 U				
Aroclor 1248	[0.5]	1 U	1 U	1 U				
Aroclor 1254	[0.5]	1 U	1 U	1 U				
Aroclor 1260	[0.5]	1 U	1 U	1 U				
<b>Inorganics</b>								
Arsenic	[14.0]	3 U	1.7 U	<del>1.7 B</del>				
Chromium VI	[86.0]	10 U	10 U	10 U				
Lead	[26.8]	2.2 U	1.6 U	1.5 B				
Nickel	[100]	8.6 B	5.2 B	5.9 B				
Zinc	[152.0]	1.1 U	4.6 U	14.0 B				
Cyanide (Total)	[23.9]	<del>1.1 B</del>	2.3 B	3.7 B				

**Notes:**

All concentrations are in ug/L.

Concentrations in bold exceed the Acceptable Stream Concentrations as presented in Revised Exhibit A, Table 3-1.

[2] = Revised Site-Specific Acceptable Stream Concentrations as determined in the Background Surface and Subsurface Water Monitoring Report

U = Analyte not detected. The value shown is the associated detection limit.

B = Analyte was also detected in the laboratory method blank (organic) or analyte value is <contract required detection limit but >= instrument

J = Estimated Value.

D = Compound quantitated on a diluted sample.